CHNOLOGY DEPT.

The EDISON ELECTRIC INSTITUTE BULLETIN

November 1958

Committee Plans of Two EEI Divisions

Sales Promotion Competition

The Electric Industry Past and Future

Kinsey M. Robinson

Cost Control Through Selection and Training

DeWitt Pike

Published Monthly by Edison Electric Institute

ELECTRICAL RESEARCH STATISTICS
THE ELECTRIC LIGHT AND POWER INDUSTRY

Current Statistical Data Covering 100 Per Cent of Industry

(Includes Investor-Owned Companies, Cooperatives, and Government-Owned Utilities)

August 1957-1958

SOURCE AND DISPOSAL OF ENERGY—MONTH OF AUGUST

	1958	1957	%
NET GENERATION* (Kwhrs in Thousands)			
By Fuel Burning Plants	45,450,894	45,416,097	+ 0.1
By Water Power Plants	11,194,491	10,032,614	+11.6
Total Generation	**56,645,385**	**55,448,711**	**+ 2.2**
ADD—Net Imports Over International Boundaries	161,281	195,535	−17.5
Less—Company Use	162,228	157,678	+ 2.9
Less—Energy Used by Producer	1,635,529	1,742,258	− 6.1
Net Energy for Distribution	**55,008,909**	**53,744,310**	**+ 2.4**
Lost and Unaccounted for	6,089,531	5,768,326	+ 5.6
Sales to Ultimate Customers	**48,919,378**	**47,975,984**	**+ 2.0**

CLASSIFICATION OF SALES

NUMBER OF CUSTOMERS—As of August 31st			
Residential or Domestic	47,387,735	46,485,513	+ 1.9
Rural (Distinct Rural Rates)	1,660,481	1,644,191	+ 1.0
Commercial or Industrial:			
Small Light and Power	6,281,066	6,198,419	+ 1.3
Large Light and Power	314,389	309,110	+ 1.7
Other Customers	186,909	180,300	+ 3.7
Total Ultimate Customers	**55,830,580**	**54,817,533**	**+ 1.8**
KILOWATTHOUR SALES—During Month of August (Kwhrs in Thousands)			
Residential or Domestic	12,885,273	11,995,816	+ 7.4
Rural (Distinct Rural Rates)	1,312,968	1,339,141	− 2.0
Commercial or Industrial:			
Small Light and Power	9,494,009	8,839,086	+ 7.4
Large Light and Power	23,375,273	24,026,013	− 2.7
Street and Highway Lighting	419,096	387,835	+ 8.1
Other Public Authorities	1,078,430	1,006,743	+ 7.1
Railways and Railroads:			
Street and Interurban Railways	155,552	172,840	−10.0
Electrified Railroads	137,317	149,030	− 7.9
Interdepartmental	61,460	59,480	+ 3.3
Total to Ultimate Customers	**48,919,378**	**47,975,984**	**+ 2.0**
Revenue from Ultimate Customers (Thousands)	**$836,479**	**$796,383**	**+ 5.0**

RESIDENTIAL OR DOMESTIC SERVICE

AVERAGE CUSTOMER DATA—for 12 months ended August 31, 1958			
Kilowatthours per Customer	3,314	3,104	+ 6.8
Average Annual Bill	$83.84	$79.77	+ 5.1
Revenue per Kilowatthour	2.53¢	2.57¢	− 1.6

* By Courtesy of the Federal Power Commission.

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The objectives of the Edison Electric Institute are:

The advancement in the public service of the art of producing, transmitting, and distributing electricity and the promotion of scientific research in such field.

The ascertainment and making available to the members and the public of factual information, data, and statistics relating to the electric industry.

To aid its operating company members to generate and sell electric energy at the lowest possible price commensurate with safe and adequate service, giving due regard to the interests of consumer, investor, and employee.

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CONVENTIONS AND MEETINGS

1958

NOVEMBER

5- 7 New Jersey Utilities Association Annual Meeting, Seaview Country Club, Absecon, N. J.

6- 7 PEA Fall Meeting, Relay Committee, Americus Hotel, Allentown, Pa.

10-12 EEI Accident Prevention Committee, Hotel McAlpin, NYC

10-14 NEMA Annual Meeting, Traymore Hotel, Atlantic City, N. J.

12-14 Southeastern Electric Exchange Sales Section, Biltmore Hotel, Atlanta, Ga.

13-14 EEI Commercial Cooking & Water Heating Committee, Pittsburgh, Pa.

13-14 Electric Council of New England Annual Conference, Hotel Somerset, Boston, Mass. (Members Only).

17-18 EEI-AGA Internal Auditing Committees, Sheraton-Jefferson Hotel, St. Louis, Mo.

17-20 NARUC Annual Convention, Westward Ho Hotel, Phoenix, Ariz.

18-20 American Standards Association, Roosevelt Hotel, NYC

19-21 EEI Industrial Power & Heating Group, Pittsburgh, Pa.

20-21 EEI Commercial Lighting Committee, Statler Hotel, Cleveland, Ohio

24-25 EEI-AGA General Accounting Committees, Atlanta Biltmore Hotel, Atlanta, Ga.

24-25 EEI-AGA Plant Accounting and Property Records Committees, Atlanta Biltmore Hotel, Atlanta, Ga.

30-Dec. 5 American Society Mechanical Engineers Annual Meeting, Statler & Sheraton McAlpin Hotels, NYC

DECEMBER

1- 3 EEI-AGA Electronics Seminar, Commodore Hotel, NYC

4 EEI Industrial Relations Committee, EEI Headquarters, NYC.

4- 5 EEI-AGA Customer Accounting Committees, Belmont Plaza Hotel, NYC.

4- 5 EEI Electric Space Heating & Air Conditioning Committee, St. Louis, Mo.

8- 9 EEI-AGA Accounting Employee Relations Committees, Atlanta Biltmore Hotel, Atlanta, Ga.

8- 9 EEI-AGA Customer Collections Committees, Atlanta Biltmore Hotel, Atlanta, Ga.

8- 9 EEI-AGA Customer Relations Committees, Atlanta Biltmore Hotel, Atlanta, Ga.

10-11 EEI Street Lighting Committee, Hendersonville, N. C.

11 EEI-AGA Depreciation Accounting Committees, Boardroom, AGA Headquarters, NYC.

12 EEI-AGA Depreciation Accounting Committees, Rooms 1-2, EEI Headquarters, NYC.

1959

JANUARY

15-16 EEI Industrial Power & Heating Group, Biltmore Hotel, Atlanta, Ga.

15-16 Joint EEI Industrial Relations Committee-Personnel Practices Committee of the Pennsylvania Electric Association, Carlton House, Pittsburgh, Pa.

29-30 PUAA Region 9 Meeting, Timberline Lodge, Portland, Ore.

FEBRUARY

2- 4 EEI Prime Movers Committee, Hotel Beaumont, Beaumont, Texas

5- 6 Missouri Valley Electric Association Industrial and Commercial Sales Conference, President Hotel, Kansas City, Mo.

12-13 EEI Transmission and Distribution Committee, Morrison Hotel, Chicago, Ill.

12-13 Pacific Coast Electrical Association Business Development Conference, Hotel Sheraton-Palace, San Francisco, Calif.

16-17 EEI-AGA Accounting Conference Final Working Committee, Lord Baltimore Hotel, Baltimore, Md.

16-17 EEI Electrical System & Equipment Committee, Atlanta Biltmore Hotel, Atlanta, Ga.

MARCH

5- 6 Joint EEI Industrial Relations Committee-Personnel Administration Section, Southeastern Electrical Exchange, Mayflower Hotel, Washington, D. C.

26-27 Oklahoma Utilities Association Annual Convention, Mayo Hotel, Tulsa, Okla.

30-31 Pacific Coast Electrical League Engineering and Operating Conference, Hotel Lafayette, Long Beach, Calif.

APRIL

6- 8 EEI 27th Annual Convention, New Orleans, La.

6- 9 EEI-AGA 18th Annual Conference on Operation of Public Utility Motor Vehicles, Netherland Hilton Hotel, Cincinnati, Ohio

8- 9 Pacific Coast Electrical Association Administrative Services Conference, Hotel Lafayette, Long Beach, Calif.

15-17 Missouri Valley Electric Association Engineering Conference, President Hotel and Municipal Auditorium, Kansas City, Mo.

20-22 EEI-AGA National Conference of Electric and Gas Accountants, Sherman Hotel, Chicago, Ill.

27-29 EEI Meter & Service Committee, Chase Hotel, St. Louis, Mo.

MAY

3- 6 EEI Purchasing and Stores Annual Meeting, Hotel Soreno, St. Petersburg, Fla.

20-22 Pacific Coast Electrical Association Annual Convention, Fairmont Hotel, San Francisco, Calif.

Committee Plans for Two Divisions

Accounting Division Committees

These brief articles covering the projected activities of committees of two EEI divisions conclude the summarization of the Institute's Committee plans. The first articles appeared last month.

THE EEI Accounting Division committees plan their work, program and activities in cooperation with the corresponding committees of the American Gas Association's Accounting Section. A number of these committees met jointly in organization meetings in Cincinnati, Ohio, Sept. 8-9, to make plans for the current administrative year.

Much of the output of these committee activities is highlighted in the annual conference meeting sponsored by the two accounting groups. The 1959 National Conference of Electric and Gas Utility Accountants will be held in Chicago next April 20-22. Planned activities include continuation of long-range projects, of a nature considered of vital interest to accounting people in the industries. The committees are generally geared to consider such problems which may arise on short notice and require recommendations, comments or discussion.

ACCOUNTING DIVISION EXECUTIVE COMMITTEE

The Accounting Division Executive Committee is under the Chairmanship of BEACH J. MCMILLEN, The Cincinnati Gas & Electric Co., and the Vice Chairmanship of PARKER R. LAWSON, Pennsylvania Electric Co. This committee has general supervision over the activities of all Accounting Division committees and is aided in carrying out its work by the Advisory Committee, consisting of the five immediate past chairmen of the Accounting Division Executive Committee. The purpose of the Advisory Committee is to furnish advice and counsel to the officers of the Accounting Division on important matters affecting the industry or operation of the division.

Chairman BEACH J. MCMILLEN is Manager of the Service Department, The Cincinnati Gas & Electric Co. After attending the University of Cincinnati, he joined CG&E in 1928, beginning as a co-op student. He was appointed assistant to the manager of the service department in 1936. After the war he became assistant manager of the department, and in 1948 was named manager. He has served as chairman or coordinator of several EEI and AGA or joint EEI-AGA activities and committees.

BEACH J. MCMILLEN
Chairman of the Accounting Division Executive Committee

CUSTOMER ACTIVITIES GROUP

ALLEN B. WILSON, Georgia Power Co., is Coordinator of the Customer Activities Group, comprising three committees, and has the responsibility of coordinating the activities of the three committees in this group in accordance with the program of the Accounting Division.

Coordinator ALLEN B. WILSON, Assistant Treasurer, Georgia Power Co., joined that utility in 1934. Subsequently he held various accounting and auditing positions until after World War II, in which he was with the U. S. Maritime Service. In 1957, he was elected an assistant treasurer of his company. He is presently chairman of his company's Advisory Committee on Methods and Practices and is a member of The Southern Co.'s Advisory Committee on Systems and Procedures. Formerly a chairman of E.E.I.'s Customer Accounting Committee, he is now the vice chairman of the Southeastern Electric Exchange's Customer Activities Group. He was educated at Oglethorpe University and Georgia State College.

ALLEN B. WILSON
Coordinator of the Customer Activities Group

Accounting Division Customer Relations Committee

The Accounting Division Customer Relations Committee, under the Chairmanship of RAY D. DAVIS, Ohio Power Co., and the Vice Chairmanship of JOHN B. WHITE, JR., Duquesne Light Co., will include in its program for the coming year studies on various contact employee training programs with comparisons including media of use, administration, amount of time spent, level of participation, subjects cov-

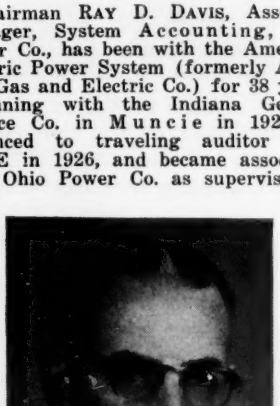
RAY D. DAVIS
Chairman of the Accounting Customer Relations Committee

ered; a study and report on how contact employees may be motivated to perform at the top of their ability; and how to determine the methods of various customer service units in reflecting customer attitude, concerning company policies and practices, to top management for decision-making purposes.

A task force will again review that ever-popular subject of high bills to determine the cause, prevention, and treatment; also consideration will be given to meter readings, billing, and budget billing with respect to estimating some portion of bills to reduce meter reading work with an end in view of determining optimum per cent of bills to be estimated, and consideration given to changing estimating practices to provide year-round budget billing to eliminate seasonal peak bills. A paper already drafted will be presented at the Spring Conference titled, "Customer Information—What, Why, and How." Plans are also being made for a round-table session at the Conference where pertinent questions and problems in the area of customer relations may be discussed.

The committee will participate with the Customer Accounting and Electronics Committees in the joint sessions of the Spring Conference on the subject of electronic billing, its problems and opportunities.

Chairman RAY D. DAVIS, Associate Manager, System Accounting, Ohio Power Co., has been with the American Electric Power System (formerly American Gas and Electric Co.) for 38 years. Beginning with the Indiana General Service Co. in Muncie in 1920, he advanced to traveling auditor with AG&E in 1926, and became associated with Ohio Power Co. as supervisor of customer accounting in 1938. He was advanced to assistant manager of system accounting in 1947, and to his present position in 1958. Active in EEI work for many years, he has been a member of the Customer Accounting and Customer Relations Committees, assisting in development of many projects as well as serving as project chairman.



DUDLEY M. ARNOLD
Chairman of the Customer Accounting Committee

Customer Accounting Committee

The Customer Accounting Committee, under the Chairmanship of DUDLEY M. ARNOLD, Pennsylvania Power Co., and the Vice Chairmanship of RICHARD G. MAAS, Wisconsin Electric Power Co., hopes to continue the ambitious program presented by this committee in previous years.

This year the committee will develop various projects for presentation at the annual Spring Conference, with particular emphasis on the application of electronics to customers' accounting. There will be a discussion of input and output systems and an appraisal of electronic accounting systems and their application to all customer activities in serving customers.

The results of a study of the systems and procedures for the maintenance of meter records from the viewpoint of property records, test records, billing and service records and their uses with a view to eliminating duplicated effort will be presented. A report will be given of the practices now used by utilities to insure that electric meter billing constants and gas meter pressure correction factors are correctly recorded and used in billing customers' accounts.

An opportunity will be given to all attending the Spring Conference to participate in an informal discussion of proven new ideas in customer accounting and billing methods that have been effective in reducing costs.

A report will be given of the trends in maintaining ledgers in customer accounting and methods used in furnishing information for handling bill inquiries.

The committee will prepare a compilation of the budget billing procedures now in use by various companies, which should be of interest to any company giving consideration to budget billing.

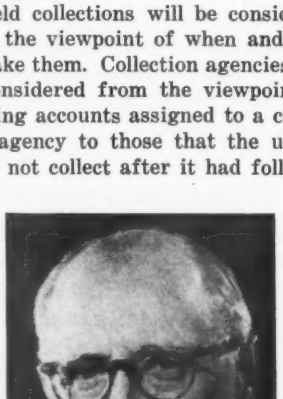
Chairman DUDLEY M. ARNOLD, Assistant Secretary and Assistant Treasurer, Pennsylvania Power Co., has been with the company for 30 years. He was named to his present position in 1949; prior to that, he held positions including those of division auditor and general supervisor of Customers' Accounting. Prior to 1950, he was active in Pennsylvania Electric Association committee work. He was a member of the EEI Customer Collection Committee from 1950 through 1952, and has been a member of the Customer Accounting Committee since 1953.

Customer Collections Committee

Under the Chairmanship of FOREST U. NAYLOR, Pacific Gas and Electric Co., and the Vice Chairmanship of MELVIN G. WUEST, The Cincinnati Gas & Electric Co., the Customer Collections Committee will develop a program which should prove helpful to industry credit and collection men.

The committee will continue to report data on the credit and collection experience of a representative group of electric and gas companies, together with a narrative comment, for the 12 months ended Dec. 31 and 12 months ended June 30, with comparative data in connection with the Credit Picture project. The report for the Dec. 31 period will be formalized into a report for the annual Spring Conference. Under the heading of "What Price Credit Protection?" a project group will arrange several ideas, problems and practices for discussion, preceded by a brief commentary about new or effective procedures practiced by one or more utilities, in developing a half-day conference session of the discussion type.

Field collections will be considered from the viewpoint of when and how to make them. Collection agencies will be considered from the viewpoint of limiting accounts assigned to a collection agency to those that the utility could not collect after it had followed



FOREST U. NAYLOR
Chairman of the Customer Collections Committee

A. R. ST. BERNARD
Coordinator of the General Activities Group

up unpaid bills and to the extent that the cost of doing so was justified.

In other plans for the annual Spring Conference, the committee expects to develop two subjects for the joint customer activities group session under the heading of "Collections Are Everybody's Business," stressing the importance to all groups of the utility industry as being responsible for overall credit and collection problems, and "Electronic Billing—Its Problems and Its Opportunities," from the viewpoint of customer collections.

Chairman FOREST U. NAYLOR, Manager of Credit and Collection Department, Pacific Gas and Electric Co., has been with that utility since he was graduated from the University of California in 1921. He joined PG&E as a sales engineer and later served for 18 years as manager of gas sales and was administrative assistant to the vice president of public relations and sales. He has been in his present position for 13 years. He is past president of the Credit Managers' Association of Northern and Central California.

GENERAL ACTIVITIES GROUP

A. R. ST. BERNARD, The Cleveland Electric Illuminating Co., is Coordinator of the General Activities Group, comprising five committees, and is responsible for coordinating the activities of these committees in conjunction with the overall program of the EEI Accounting Division.

Coordinator A. R. ST. BERNARD is manager of the General Accounting Department, The Cleveland Electric Illuminating Co. He has served in that capacity since October, 1951. Previously he had been assistant manager for six years. In his 25 years with the company, he has been associated with the Construction Costs, Service, Methods and Internal Auditing elements, in addition to the General Accounting Department. Prior to joining the Cleveland company he spent two years with the Texas-Louisiana Power Co. in Texas and New Mexico. He attended college in Chicago and took additional training at Cleveland College of Western Reserve University, Dyke School of Commerce and Ohio University. He is vice president of the Cleveland Chapter of National Association of Accountants.

Depreciation Accounting Committee

The Depreciation Accounting Committee is under the Chairmanship of L. W. ROBINSON, Consumers Power Co., and CHARLES D. DAVIS, The Detroit Edison Co., is Vice Chairman. It will continue its studies of liberalized depreciation with particular attention to its economic effects. This will probably develop into a joint effort with one or perhaps two other communities. The record-keeping requirements resulting from recent amendments to the FPC Uniform System of Accounts will also be reviewed.

The committee's long-range project concerning methods of accounting for salvage and plant removal costs will be further developed.

A project covering the use of electronic computers for depreciation computations is well underway, and it is expected that the successful programs of various companies will be made available as a part of a paper to be presented at the Spring Conference.

A report will also be made at the Spring Conference on court and regulatory decisions made during the year which relate to depreciation matters.

The committee will join with one or two other committees in a joint study of the problems involved in connection with relocation of property because of highway or other changes.

Other activities of the committee will include developments with respect to depreciation of atomic energy plants, methods of depreciation accruals and reserve computations.

Chairman L. W. ROBINSON is Plant Accounting Supervisor and Assistant Controller, Consumers Power Co. Following graduation from Iowa State College in 1923 with a degree in electrical engineering, he was employed by Consumers. He later was employed by that utility's engineering service organization. His assignments included transmission lines design and construction supervision, specification, budget, valuations and original costs studies. He returned to Consumers in 1943 as plant accounting supervisor.

L. W. ROBINSON
Chairman of the Depreciation Accounting Committee

General Accounting Committee

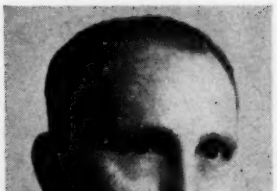
The General Accounting Committee, which is under the Chairmanship of GEORGE F. JONES, Potomac Electric Power Co. and the Vice Chairmanship of MILES J. DOAN, The Cincinnati Gas & Electric Co., will continue the study of annual reports for 1957 to summarize accounting trends in such reports. The project involving the survey of new accounting developments affecting utilities will also be continued. A review of general accounting electronic applications in operation will be undertaken.

The committee has organized project or task force groups to develop studies of overhead cost and expense, productivity measurements and functional accounting reports. In addition, a group from the committee will look at the important subject of developing accountants.

Developments in accelerated depreciation will also be studied as part of the committee program for the coming administrative year.

The preservation of vital information to permit reconstruction of records after a catastrophe and reimbursement for relocation of facilities due to highway construction will also be studied by task force groups of the committee. It is expected that the committee will develop a method and procedure report as part of its program activities.

Chairman GEORGE F. JONES is Chief Accountant, Potomac Electric Power Co., in charge of general accounting. He attended the University of Maryland and holds a master's degree in accounting. Mr. Jones has held positions in the company's financial, budget, administrative and general accounting sections. He has been actice in EEI committee work for



GEORGE F. JONES
Chairman of the General
Accounting Committee

ANTON STEVEN
Chairman of the Internal
Auditing Committee

many years. He also has served in many capacities in local community, religious and fraternal groups.

Internal Auditing Committee

The Internal Auditing Committee, with Chairman ANTON STEVEN, West Penn Power Co., and Vice Chairman RICHARD W. BRIGGS, Virginia Electric and Power Co., will continue to serve the industry under its scope or objectives which are stated as follows:

> To discuss, study and report on internal auditing problems, techniques, procedures and philosophy; to publish such procedures, case studies or reports as will be of aid to the member companies in improving the understanding or providing more efficient administration of the internal auditing and other elements of company organization.

It is expected that additional case studies will be issued this year which in the past have been of interest not only to committee members but also to accountants and auditors in other industries and other countries. The Institute of Internal Auditors uses some of these same case studies in its quarterly publication, *The Internal Auditor*.

Other long-term projects include: Measuring and Comparing Internal Audit Performance. This subcommittee will concern itself with comparisons and other statistics of internal audit practices and performance among the member companies.

Statistical Sampling. This subcommittee will delve into the new trends and possible audit applications of statistical sampling.

Electronics. This subcommittee will keep the standing committee informed on internal auditing practices in relation to electronic data processing machines and other mechanical or machine accounting systems among member companies.

The main effort of the committee is aimed at the preparation of audit manuals which are widely studied and used by internal auditors and accounting people everywhere. These are generally short-term projects. The short-term projects in process now are: Audit of Personnel Records, Audit of Distribution Department Functions, and Audit of Taxes. Two new short-term projects were approved by the committee and they are: Audit of Appliance Service Function, and Audit of Credit and Collection.

The Audit of Appliance Service Function will take into consideration the appraisal of appliance service and repair functions and other appliance service work done on the customers' premises. It should include an appraisal of dispatching methods employed by a service department in assigning the work to its servicemen. Particular attention or emphasis should be placed on the service department's controls over productive and non-productive time and an appraisal of the administrative techniques relied upon by departmental supervision for evaluating performance.

The Audit of Credit and Collection will appraise the effectiveness of company policy and practices in the often discussed area of credit and collections. The cooperation of the Customer Collections Committee will be sought on this project.

Preliminary plans for the Spring Conference include speakers on "Work Measurement—a Management Tool." In the present climate of cost conscious executives, the theme of performance improvement and lowering of costs should meet the current needs of the industry.

Chairman ANTON STEVEN is Supervisor of Internal Audits, West Penn Power Co. Born in Cologne, Germany, he came to the United States at the age of five. He was graduated from the University of Pittsburgh in 1949 after serving in the Combat Engineers during World War II. He joined the auditing department of West Penn shortly after his graduation from Pitt. He received a master of letters degree from Pitt's School of Business Administration. He has been associated with EEI's committees since 1953.

Plant Accounting and Property Records Committee

The Plant Accounting and Property Records Committee is under the Chairmanship of L. W. BURNS, Northern States Power Co., and the Vice Chairmanship of PAUL D. JOHNSON, Consolidated Edison Co. of New York, Inc.

At the organization meeting in Cincinnati in September, long-range projects were reviewed and new projects started. Tentatively adopted as a new long-range project by the committee is the investigation of specific cases arising in plant accounting and property records work in order to have such information available for ready reference when needed. The objective would be basically educational and the cases covered probably would not number more than three to five each year.

Work will continue on forms and work sheets used, accounting for telemetering, supervisory control and carrier current equipment and, in addition, machine accounting applications to property records problems and reimbursements received from government agencies.

As a part of the forthcoming Spring Conference in Chicago next April, several new short-range projects will be undertaken for possible presentation. Included are the procedures involved and cost problems inherent in the exploration and development of underground storage areas for natural gas, discussion of problems resulting from the conditions accompanying major storm damage and restoration of service, the design and use of property records to provide the maximum service and prevent duplication. The project is entitled "Getting the Most Out of Property Records."

Another project will present the description of a mechanized work or-

der system that will meet the necessary requirements with respect to estimating, cost control, analysis and final unitization of property records for a steam electric generating station.

A report will be undertaken for possible presentation on liberalized depreciation with respect to "Today's Requirements," which will bring to date current property records with respect to recent rulings of the Internal Revenue Service.

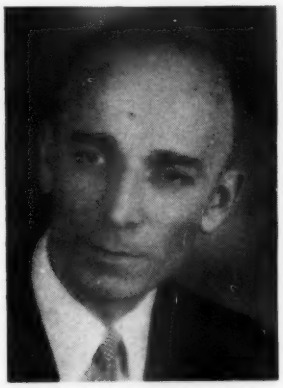
The committee plans to have a paper for presentation which will reflect the experience and results of the long-range project involving the evaluation of reports and forms used in plant accounting work as they might apply to the training, education and demonstration purposes in addition to providing means for procedures and practices. If available, a short educational motion picture of current interest to the entire industry may be presented.

The committee will participate with the General Activities Group joint sessions at the Spring Conference and will continue to work with the Accounting Developments Service Committee.

Chairman L. W. BURNS is Manager of Plant Accounting and Valuations, Northern States Power Co. Following his graduation from Parsons College, Fairfield, Iowa, in 1927, he commenced his career in the valuation department of the Byllesby Engineering and Management Corp., Chicago. He was transferred to Northern States in 1933 where he was subsequently engaged on valuations, original cost studies, and the establishment of fixed capital records. When the Plant Accounting and Valuations Department was established in 1950, he became its engineering supervisor, remaining in that capacity until 1953 when he became its assistant manager and was made manager in 1955. He has been active in EEI committee work since 1953.

Taxation Accounting Committee

The Taxation Accounting Committee has GEORGE J. COVALT, The West Penn Electric Co., as Chairman and ANTHONY G. MAIHOFER, The Detroit Edison Co., as Vice Chairman. It will continue its study of current taxation developments in collaboration with the similar AGA committee. The committee year began with a meeting in St. Petersburg, Fla., in October. At this meeting reports were received from subcommittees and papers were read on recent legislation, recent court decisions, pension trust and other deferred compensation problems and the effect of certain types of tax agreements. The meeting also included a panel discussion of questions submitted by the members and an off-the-record discussion of tax matters.

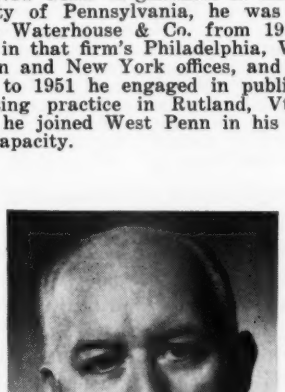


GEORGE J. COVALT
Chairman of the Taxation Accounting Committee

Another committee meeting will be held in mid-winter. A substantial part of the program for that meeting will depend upon tax developments in the meantime.

The Subcommittee to Study Proposed and Introduced Federal Tax Legislation and Regulations will continue to study new regulations as issued by the Internal Revenue Service and to watch legislative proposals.

Chairman George J. COVALT is Assistant Comptroller, The West Penn Electric Co., New York. A graduate of the University of Pennsylvania, he was with Price Waterhouse & Co. from 1926 to 1946 in that firm's Philadelphia, Washington and New York offices, and from 1946 to 1951 he engaged in public accounting practice in Rutland, Vt. In 1951 he joined West Penn in his present capacity.



L. W. BURNS
Chairman of the Plant Accounting and Property Records Committee

P. R. LAWSON
Coordinator of the Special Activities Group

SPECIAL ACTIVITIES GROUP

The Special Activities Group has as its Coordinator the Vice Chairman of the Accounting Division Executive Committee, P. R. Lawson, Pennsylvania Electric Co.

Coordinator P. R. LAWSON is Comptroller, Pennsylvania Electric Co., a position he has held since 1946. A native of Jamestown, N. Y., he attended the University of Syracuse and New York University. He holds a degree in accounting and has done graduate work in finance and economics. He has been affiliated with the utility industry at both the holding company and operating company levels. He served with the General Public Utilities Corp., or predecessor system until 1944 when he was transferred to Johnstown, Pa., as treasurer of Pennsylvania Electric. He is active in the Pennsylvania Electric Association and is a member of the Executive Committee and adviser to the accounting section. In 1952 he was appointed chairman of the EEI Special Committee on Uniform System Accounts. Before that time, Mr. Lawson had served as chairman of a subcommittee in the Special Committee on Uniform System Accounts. In 1957 he was appointed Coordinator of the General Activities Group.

Accounting Developments Service Committee

Under the Chairmanship of JOHN P. WILLIAMSON, The Toledo Edison Co., this committee will endeavor to publish, in cooperation with its AGA corresponding committee, accounting development service releases on a quarterly basis. Such releases, in accordance with the scope of the committee's activity, would include new ideas and comments pertaining to accounting practice and new techniques developed by manufacturers of office equipment which are of general interest for dissemination to member companies.

The committee will consider the

development of a list of correspondents in member companies as a means of soliciting suggestions and circulating published releases within their companies. The committee will also endeavor to develop a planned program of periodically soliciting new idea suggestions in specialized areas such as electronics, bill forms, office service and filing. The continued use of liaison members within standing committees will be maintained to accumulate material and data for committee releases.

Chairman JOHN P. WILLIAMSON is Director of Methods and Procedures, The Toledo Edison Co. He formed this department for the utility after joining Toledo Edison in 1951. Before that time he was affiliated with the national public accounting firm of Arthur Andersen & Co. for six years where he specialized in public utility work. Mr. Williamson is a graduate of Kent State University and has since studied at the University of Toledo and the University of Michigan. He is active in several business and civic organizations.

Accounting Employee Relations Committee

The Chairman of the Accounting Employee Relations Committee is J. J. LEARY, Boston Edison Co. The committee's activities center around the plan for its program contribution at the annual Spring Conference in April, 1959.

Subjects have been assigned to members of the committee and will include one which will consider what accounting people do to get records to answer questions asked by employees who contact the public.

Another project will endeavor to point out the problems confronting

J. J. LEARY
Chairman of the Accounting Employee Relations Committee

management as to placing employees displaced by automation. The potential use of more women supervisors in the accounting field will be another subject and a paper discussing in detail cadet training versus on-the-job employees will result from this project, bringing out the pros and cons of both and including definite recommendations. Question periods after each of the presentations and a panel, called accounting employees clinic, with audience participation, will permit generous discussion of accounting employee relations at the forthcoming Spring Conference.

Chairman J. J. LEARY, Superintendent, General Accounting Department, Boston Edison Co., has been with the company for 41 years. He joined the company as a clerk in the general accounting department and was promoted successively to supervisor, assistant division head, and division head. Before becoming a member of the Accounting Employee Relations Committee, he participated in General Accounting Committee activities.

Application of Accounting Principles Committee

The Application of Accounting Principles Committee is under the Chairmanship of V. A. KOS, Commonwealth Edison Co., and the Vice Chairmanship of ALLAN G. MITCHELL, Philadelphia Electric Co. The committee keeps informed on the development of accounting principles, conventions, and practices in the accounting profession, with special reference to their application to the electric industry.

It acts as a point of reference when opinion is desired regarding the application to the electric industry of accounting changes proposed by professional accounting organizations, regulatory authorities, or other sources. The committee's activities have primarily consisted of submitting to the American Institute of Certified Public Accountants, either directly or through the chairman of the Accounting Division, advisory opinions and suggestions relative to proposed accounting research bulletins of that association of public accountants.

Chairman V. A. KOS has been Assistant Comptroller, Commonwealth Edison Co., since 1952, and has been employed by the company for more than 30 years. He studied accounting at Loyola University. He received an Illinois CPA certificate in 1941. He has spent more than 20 years in the comptroller's office of Commonwealth Edison as senior grade staff accountant, supervising staff accountant, assistant to the comptroller, and assistant comptroller.

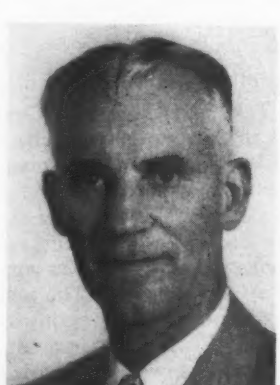
Electronic Accounting Machine Developments Committee

Under the Chairmanship of RAY E. HARBAUGH, Philadelphia Electric Co., this committee will continue to keep abreast of developments being made in the application of electronic techniques in all fields of accounting and will report these developments through the bulletin, *Tubes and Tapes*, issued by the joint EEI-AGA committees.

The committee also will continue to serve as a contact channel between the industry and the manufacturers of electronic accounting machine equipment.

An electronics seminar is planned for Dec. 1-3, 1958, at the Hotel Commodore in New York City, which will include a discussion of new equipment developments in the area of imprint, computer and output, separate panel sessions on pertinent applications and

JOHN P. WILLIAMSON
Chairman of the Accounting Developments Service Committee



V. A. KOS
Chairman of the Application of Accounting Principles Committee

RAY E. HARBAUGH
Chairman of Electronic Accounting Machine Development Committee

problem discussions and presentations under the general heading of the "ABC's of Electronics."

Chairman RAY E. HARBAUGH is Manager of Systems Division, Philadelphia Electric Co. He joined that organization in 1942. A business administration graduate of Ursinus College, Mr. Harbaugh has served in the statistical, budget and systems divisions of his company. He also has served on the EEI General Accounting and Accounting Developments Service Committees. He is presently Chairman of the General and Customers' Accounting Committee of the Pennsylvania Electric Association. Mr. Harbaugh is a past president of the founding chapter of the Systems and Procedures Association of America and has also served on the national board of that group.

Uniform System of Accounts Committee

With R. G. SCHNEIDER, Virginia Electric and Power Co., as Chairman, this committee plans for the administrative year 1958-1959 to keep the industry informed of the status of developments and to make recommendations to the Accounting Division Executive Committee as to the position the industry should take in respect to any changes proposed in the uniform system of accounts for electric utilities.

The committee is considering suggestions for amendment to the uniform system of accounts with respect to providing accounts for nuclear power plants and is now working jointly with a subcommittee of the NARUC Committee on Accounts and Statistics on such an amendment. A preliminary draft dated Sept. 1, 1958, is under study by these two committees.

R. G. SCHNEIDER
Chairman of the Uniform System of Accounts Committee

Chairman R. G. SCHNEIDER, Controller, Virginia Electric and Power Co., has been associated with the company since 1922. He has held positions in the company's operating, statistics, stores and accounting sections. He was appointed to his present position in 1953. Active in the EEI Accounting Division for several years, Mr. Schneider has served on the Uniform System of Accounts and Accounting Developments Service Committees and as chairman of the Customer Accounting Committee. He also has been coordinator of the Customer Activities Group.

Commercial Division Committees

SALES and more sales is the word for the 1959 activities of the Commercial Division of EEI. Under the guidance of Chairman E. O. George, Vice President of The Detroit Edison Co., all of the committees will be asked to slant their 1958-59 activities with the thought of eventually accomplishing greater sales of electricity for the companies they represent. Full recognition will be given the hard-sell theme of today's business with a healthy alertness to competition.

One of the major activities planned by the Division is the new National Electrical Living Program of advertising and promotion approved by the EEI Board of Directors in September and now being *sold individually* to the member companies.

This Program is geared primarily to one objective—to raise the standards of living of American households through the increased use of electricity and electrical appliances. The program calls for the raising and expenditure of a sum of more than $2.5 million in daytime television, national magazine advertising, and other media to promote appliances, lighting, and HOUSEPOWER.

Virtually the entire attention and effort of the Residential Group Committees will be directed in planning, organizing and programming the various segments of this National Advertising Program—the first of this nature ever attempted under the sponsorship of Edison Electric Institute.

Next to the Electrical Living Program, the division's outstanding efforts will be devoted to the promotion of electric space heating, both in homes and in commercial and industrial establishments. Not only the Electric Space Heating and Air Conditioning Committee, but also the Industrial Power and Heating Group and the Residential Appliance Promotion Committee are interested in participating in this field of promotional activity.

In this connection, the Electric Housing Subcommittee of the Commercial Division Executive Committee, has been working with an independent firm in the production of a report on electric space heating of multiple-family dwelling units—particularly service establishments. This report should be available to all members of the Institute before the end of the year.

The HOUSEPOWER Program, which has been in existence over two years, will be included under the Electrical Living Program and will utilize almost exclusively national publications such as *Life*, *Saturday Evening Post*, and *Good Housekeep-*

ing in the continued promotion of a better public understanding of the importance and need for better home wiring.

The Industrial Power and Heating Group, cooperating with The Industrial Electrification Council, will lend its efforts toward a program to improve in-plant distribution and thereby facilitate greater use of electricity in industry.

The *Farm Better Electrically* Program, launched two years ago, will be continued with greater vigor. Efforts will also be made by the Farm Group Committee toward working with farm youth and providing them with a better of understanding of our electric business and the advantages of greater use of electricity.

For several years, the Street Lighting Committee has been working on a *Street Lighting Handbook* which should find production accomplished early in 1959.

The Home Service Committee will conduct the annual Live Better Electrically Women's Conference again in January, 1959, at the Edgewater Beach Hotel in Chicago.

EEI representatives will participate in the observance of National Electrical Week, February 8-14, 1959, at which time the "kickoff" of the New National Electrical Living Advertising and Promotional Program will take place.

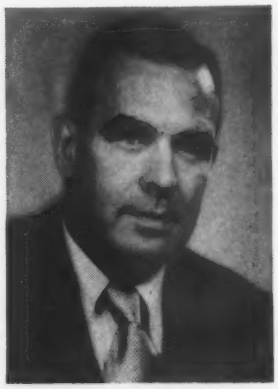
The 1958-59 activities will include the first national effort by EEI to promote improvement in residential lighting, a subject constantly held forth as of stellar importance but neglected by most companies for various reasons.

Many other proposed Commercial Division activities outlined in the following reports will contribute toward the national effort to capture a larger share of national business and continue the trend toward fuller electric living.

COMMERCIAL DIVISION EXECUTIVE COMMITTEE

The Commercial Division Executive Committee, under the Chairmanship of E. O. GEORGE, The Detroit Edison Co., is responsible for approving and coordinating activities of all Commercial Division committees.

The committees of the Commercial Sales, Farm, Industrial Power and Heating, and Residential Groups are responsible for covering the major electrical markets.



E. O. GEORGE
Chairman of the Commercial Division Executive Committee

Chairman E. O. GEORGE, Vice President, The Detroit Edison Co., joined the company in 1929 as a commercial office clerk. He served as supervisor of training, assistant supervisor and supervisor of commercial office division, assistant commercial manager, commercial manager, manager of sales and was elected vice president. He is past chairman of the EEI Residential Section, Sales Training Committee and Wiring Promotion Committee. He is a past president of the Michigan Electric Association and the American Marketing Association, Michigan Chapter. He is chairman of the Public Relations Advisory Committee, Michigan Economic Development Commission and a director of the Detroit Sales Executives Club.

ADVERTISING COMMITTEE

The Advertising Committee, under the Chairmanship of JAMES V. MACDONALD, Boston Edison Co., provides advertising assistance to the various EEI committees which conduct national advertising programs or prepare advertising for use by local companies.

JAMES V. MACDONALD
Chairman of the Advertising Committee

Chairman JAMES V. MACDONALD has been Manager of Boston Edison Co.'s Advertising and Publicity Department since 1950. He has been associated with the Boston utility since 1923 and for more than 25 years has worked with the company's public relations organization, largely in publications, advertising and publicity capacities. In World War II he served in the U. S. Navy with the rank of lieutenant commander. He twice was Better Copy Committee chairman for the Public Utilities Advertising Association. This is his third year as a member of the EEI Advertising Committee and he assisted variously in connection with the Institute's Boston Convention in June. He is a director of Electric Institute Inc., electrical trade association of Eastern Massachusetts.

AREA DEVELOPMENT COMMITTEE

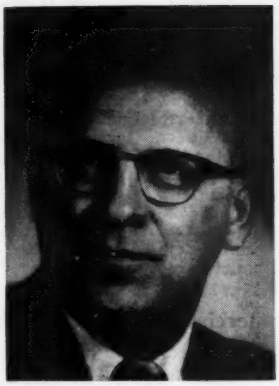
Individually, as well as collectively, the various members of the Area Development Committee are constantly in the field working alongside bankers, transportation representatives, civic leaders, industrial foundation representatives, city councils, and state development officials—all striving to incite civic pride and interest among our respective communities.

By establishing pride in our areas, we are, as electric utility representatives, better able to present the factors pointing toward the necessity for a sound and orderly development program in order to improve the economy of the territory served by each of our electric companies. It is through this type of action that we are better able to help provide for a more profitable future of our own companies.

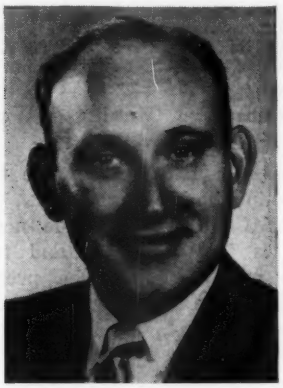
To this end the Area Development Committee and its members, under the Chairmanship of SAMUEL F. MCGOWAN, Northern States Power Co., have in the past year participated in projects dedicated to improving the economy of our individual service areas. This has been accomplished by our participation in research studies, sound community planning, and partipication in management seminars, as well as our own committee meetings.

We have assisted in the preparation of material for the Committee for Economic Development in its area development program.

After three years of study and careful preparation, our committee has prepared a motion picture film dedicated to sound community planning. This film was made under the sponsorship of Edison Electric Insti-



SAMUEL F. MCGOWAN
Chairman of the Area Development Committee



G. W. WARNER
Chairman of the Sales Personnel and Training Committee

GEORGE W. OUSLER
Chairman of the Electrical Living Policy Committee

tute and in cooperation with the American Society of Planning Officials and the American Institute of Planners. This film will have its preview at the Area Development Committee Annual Workshop session held in the Somerset Hotel in Boston, Mass., Oct. 15-16, 1958. Here, for the first time, an interested audience will view the 30-minute sound-color motion picture film telling in a graphic style the benefits of sound planning and its relationship to progressive community development. Members of the committee have also taken part, as individuals, in two American Management Association seminars dedicated to the exchange of ideas among those interested in industrial development and to the furthering of private enterprise and sound community planning for improving the nation's economy.

Only if our areas have sound planning programs in effect, will we as committee members be able to fulfill our obligations to existing industrial customers and to those potential industries that are seeking new and branch plant locations. Likewise, only if these prerequisites exist, will we be able to assist in the proper diversification of industry.

Throughout the year there has been an exchange of mailings to committee members and to member companies of various publications and articles relating to the many phases of area development. This information has helped to keep our members informed on current happenings in this highly specialized field. Visual aids, as used by various organizations and groups, also have been studied. These visual aids, which improve our presentation technique, have been distributed to all members of the committee.

It is hoped that through close cooperation between committee members and member companies, EEI's Area Development Committee will be able to provide even a better service in the complex field of area development.

Chairman SAMUEL F. MCGOWAN, Director of Area Development, Northern States Power Co., studied architecture at the University of Minnesota and practiced civil engineering before joining the electric utility as a draftsman in the lighting sales department in 1934. He has served in the capacity of draftsman, lighting salesman and supervisor of lighting sales prior to joining the general office staff of NSP in 1950 as manager of the applications and extensions department. In October, 1952, Mr. McGowan was named manager of the newly created industrial development department, and in 1954 he was named director of area development, to include both industrial and rural activities.

ELECTRICAL LIVING POLICY COMMITTEE

The Electrical Living Policy Committee, under the Chairmanship of GEORGE W. OUSLER, Duquesne Light Co., has the responsibility to direct the EEI National Electrical Living Program designed to promote the sale of electricity, wiring and electrical appliances.

Chairman George W. Ousler is Vice President of the Duquesne Light Co. Following his graduation from Massachusetts Institute of Technology in 1916, he entered the employ of the engineering department of Duquesne Light where his subsequent positions in engineering and sales capacities included those of director of sales engineering, manager of rates and retail sales, and general sales manager. He was named vice president in charge of sales in 1942. Long active in EEI committee work, Mr. Ousler served for two years as Commercial Division Chairman. He is also a former president of the Pennsylvania Electric Association.

SALES PERSONNEL AND TRAINING COMMITTEE

The Sales Personnel and Training Committee, under the Chairmanship of G. W. WARNER, Consumers Power Co., has under consideration a new EEI Sales Training Course.

The new sales training course will differ from the one developed by this committee immediately after World War II in that it will consist only of flip charts. The training course will be divided into eight groups, each group consisting of 10 charts together with a leader's guide and salesman's manual.

The subject matter covered by the Sales Training Course will include the following basic selling principles:

a. Approach
b. Need
c. Solution
d. Assurance
e. Value
f. Close.

In addition, special treatment would be given of the following:

Electric Range
Water Heater
Space Heater
Refrigeration
House-Power
Lighting
Clothes Dryer.

At its next session, the Committee will review a sample of the new sales training course and prior to final determination will review the proposal with other interested committees.

It is the Committee's plan to have the new Sales Training Course available to the member companies early in 1959.

Chairman G. W. WARNER, Assistant General Appliance Sales Supervisor, Consumers Power Co., after attending Western Michigan University, joined the electric utility company in 1928 as an appliance salesman in the Grand Rapids division. In 1934 he was appointed supervisor of the electric water heater department. He was transferred in 1936 as appliance sales superintendent of the Cadillac division. He was promoted to his present position in the Jackson general office in 1945. Mr. Warner has been a member of the Sales Personnel and Training Committee since 1953.

COMMERCIAL SALES GROUP

In the EEI Commercial Group, under the Chairmanship of H. R. JONES, West Penn Power Co., all four committees—the Commercial Lighting Committee, Commercial Cooking & Water Heating Committee, Electric Space Heating & Air Conditioning Committee, and Street Lighting Committee—have planned porgrams and activities which will be most helpful to utility companies. Following are the agreed upon and approved programs of these committees.

Chairman H. R. JONES, Commercial Sales Manager, West Penn Power Co., received a B.S. degree in electrical engineering from the University of Pittsburgh in 1928. Upon graduation, he joined West Penn as a cadet engineer and in 1932 became a member of the sales department, working in layout service. After serving as a field and later a senior commercial customer representative and office supervisor in Pittsburgh, he was appointed to his present position in 1948. He has been a member of the EEI Commercial Cooking and Commercial Lighting Committees. Mr. Jones is a member of the Illuminating Engineering Society and the Electric League of Western Pennsylvania.

Commercial Cooking & Water Heating Committee

This committee, under the Chairmanship of R. L. MCCUEN, Duke Power Co., recognizes the need of utilities for a written and formal sales presentation to be prepared, particularly for institutions and hospitals. A standardized form will be made available to all utilities as a guide.

This committee will cooperate with an advertising agency to prepare and make available a national electric cooking promotional program. To counteract the intensive sales efforts and promotion by our competition, and because of the many sales opportunities with new cooking devices, continued acceptance of electric cooking, and the need for a well-organized program with which our allies can participate, such a promotional program for next year was decided upon.

Again in 1959 the Commercial Cooking Committee will sponsor the Electric Cooking Conference held in Chicago at the time of the National Restaurant Association Conference.

Commercial cooking data sheets will again be made available for purchase by utilities for their use and for distribution to architects, etc.

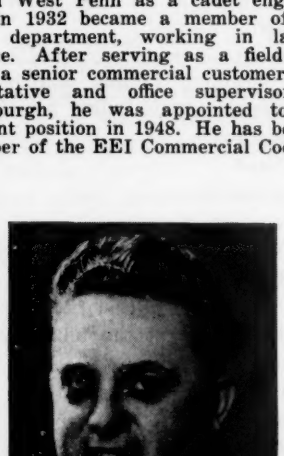
A total of four selective direct mailers on commercial cooking will be published this year. In addition, the subcommittee will produce one commercial electric water heating direct mailer.

Chairman R. L. MCCUEN is Commercial Sales Manager, Duke Power Co. In 1936 he joined Duke as head of the commercial gas department and was named to his present position in 1952. Prior to his employment with Duke, he was for 12½ years superintendent of the Georgia Power Co.'s Macon, Ga., gas department, and superintendent and sales manager of the gas department, Georgia Public Utilities, Augusta, Ga., for five years. A member of the Charlotte Engineer's Club, he was a member of the EEI Commercial Cooking and Water Heating Committee in 1957-58.

Commercial Lighting Committee

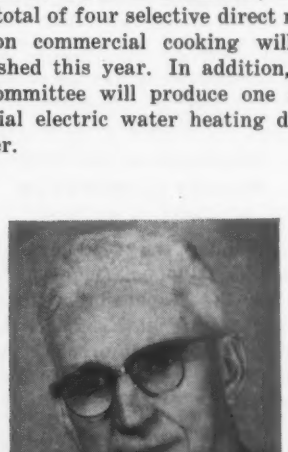
The Commercial Lighting Committee is under the Chairmanship of G. J. GILLEN, Consolidated Edison Co. of N. Y., Inc. At the first meeting members of this committee had a lively discussion on the impact of Dr. Blackwell's Lighting Research Projects and the resulting publication of new IES standards of illumination levels. The committee recognized that much promotion would have to be done with customers and among the many segments of our lighting industry to obtain acceptance of these higher illumination levels. They plan this year to obtain information on utility promotional activities, published information, and programs in connection with the new IES standards, have these printed and sent to member companies. In addition, a complete half day will be spent at the Commercial Sales Section of the Chicago Sales Conference with a program particularly designed around the new IES standards and their promotion.

As a sequel to the modernization booklet published last year, it will gather information about programs and promotional efforts in this mod-



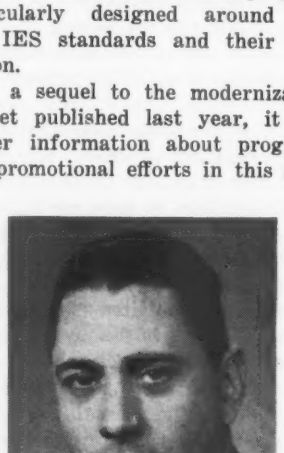
H. R. JONES

Chairman of the Commercial Sales Group



R. L. MCCUEN

Chairman of the Commercial Cooking & Water Heating Committee



G. J. GILLEN

Chairman of the Commercial Lighting Committee

ernization field and reprint the material for distribution to member companies. Because of the great interest nationally in district modernization, this material should be most helpful.

A new issue of the Lighting Demonstration Equipment Catalog, showing lighting equipment currently available for demonstrations with customers or groups of customers, will be put in booklet form and distributed to member companies.

To satisfy the needs of member companies for commercial lighting promotional material, the committee has met with several publishers of syndicated material to guide them in the kind of direct mailers and publicity material that will be made available for next year. In addition, a premium lighting piece, similar to "We The People," which has been available for two or three years, will be produced in 1959.

In discussing the activities of the National Lighting Bureau and, particularly, the Bureau's new Eye-Fi Relighting Program, the committee endorsed the activities of the Bureau in their plans to make it more applicable for utilities and also the promotional plans which will organize the lighting manufacturers of NEMA to follow through with promotional advertising.

Chairman G. J. GILLEN is Supervisor of Lighting Division, Sales Department, Consolidated Edison Co. of New York, Inc. He joined the Brooklyn Edison Co. before it merged with Con Edison in 1940. He served as a captain in the U. S. Army during World War II. Returning to Con Ed, he became a sales business representative in 1946. He received his present appointment in 1956. Mr. Gillen is a member of the Better Light Better Sight School Service Committee.

Electric Space Heating & Air Conditioning Committee

This committee is under the Chairmanship of L. E. BLADES, Arkansas Power & Light Co. The need for an electric space heating training program for our industry is recognized and plans are being made for the production of a suitable program. The Sales Personnel and Training Committee of EEI is set up to include this in a sales training program and will cooperate with this committee in the production of the section on electric space heating.

Plans are now under way for the production of an electric space heating and air conditioning handbook. This committee has been working on this project for over a year and anticipates its completion in 1959. It will be of a loose-leaf type manual with engineering data sufficient for complete design work, indexed in a simple fashion. The committee gives assurance that this manual will not be duplicated from other available sources. Because of the need for material to be sent to member companies immediately, and the fact that there will be a delay getting out this handbook, some material already submitted by contributors will be distributed to member utilities as soon as possible.

L. E. BLADES

Chairman of the Electric Space Heating and Air Conditioning Committee

A number of studies and reports, such as competitive reports, weather data reports, papers on fuel efficiencies, etc., will be sent to member companies throughout the year.

Promotional material planned by this committee for 1959 will include two mailers, one on commercial space heating and the second on commercial heat pumps. Also there will be two booklets produced on these markets.

G. G. WHEELER

Chairman of the Street Lighting Committee

Chairman L. E. BLADES is Commercial Sales Specialist, Arkansas Power & Light Co. After graduation from Oklahoma University he joined AP&L in 1947 as a clerk at Hot Springs. He subsequently served as salesman, customer service representative, commercial service representative, commercial sales representative and in 1953 was named to his present position. He served as an infantry sergeant in the ETO during World War II.

Street Lighting Committee

This committee has been working on a street lighting manual which is now being edited for publication. It is expected that this manual will be available to utilities in early 1959.

There was considerable discussion at the meeting of this committee in connection with the Federal road program and the opportunities for modern highway lighting. In the interest of keeping utility company members informed on highway lighting developments, member companies were invited to designate a correspondent with this committee. About 100 companies have done so, and a list of correspondents has been set up to whom this committee will send lighting information. The plan is to collect pictures, testimonials, policies of highway lighting, promotion methods, and happenings in the highway lighting activities for these mailings.

G. G. WHEELER, Northern States Power Co., heads this committee.

The committee, within its membership, is closely following developments in the fluorescent and mercury fields, together with the applicable tariffs to meet varying situations.

Chairman G. G. WHEELER, Municipal Sales Manager, Northern States Power Co., received a B.S. degree in electrical engineering from the University of Wisconsin in 1927 and joined NSP that year. He served in the valuation sales department and then became a statistician and later a sales engineer in the municipal sales department. He began street lighting work in 1947. A registered professional engineer in Minnesota, he is a member of the IES and has been a member of the EEI Street Lighting Committee for many years.

FARM GROUP

The Farm Group, under the Chairmanship of P. R. SCHEPERS, Consumers Power Co., is planning to continue the development of the Farm

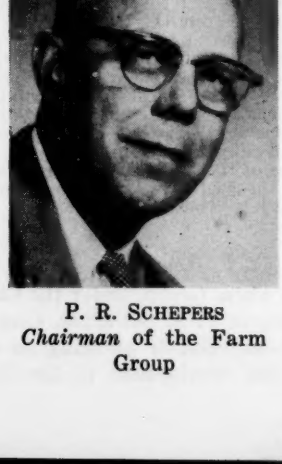
Better Electrically Program. During the past year the program has received wide acceptance in the electrical industry and among the industries' educational and trade allies. Materials prepared for the program were used in 41 states and Canada.

Chairman P. R. SCHEPERS, General Farm Supervisor, Consumers Power Co., has been employed by that utility since 1936. He has served as a salesman in Lansing, farm service supervisor in Flint and in Jackson and as assistant general farm service supervisor for the company until 1956, when he was named to his present position. He attended Alma College and Central Michigan College. He has been associated with the EEI Farm Group activities since 1947; was appointed to the Rural Youth Committee in 1953 and became chairman of the Farm Sales Promotion Committee in 1955.

Farm Development Committee

The Farm Development Committee, under the Chairmanship of MORRIS H. LLOYD, Niagara Mohawk Power Corp., has made available two educational and promotional guides; one for Ventilation and another for Crop Drying. It is planning to make similar reports available for the other promotions.

The Farm Group, through the Development Committee, plans to step up its activities in the farm utilization and youth educational field during 1959. It will study the production of a series of slide film strips, records and lesson plan books designed to tell and show the many advantages of using electricity in farm productive operations. A study and report will be made regarding 4-H and Vo-Ag youth programs currently being conducted by electric companies.



P. R. SCHEPERS
Chairman of the Farm Group

MORRIS H. LLOYD
Chairman of the Farm Development Committee

The committees also will continue to sponsor the publication of *Farm Electrification* magazine. This magazine continues to gain in popularity and is now being distributed to local farm leaders in 47 states by 153 electric companies. Subscriptions for the magazine are also received from Puerto Rico, Hawaii and 11 foreign countries.

Chairman MORRIS H. LLOYD, Agricultural Engineer in charge of Rural Electrification, Western Division, Niagara Mohawk Power Corp., received a B.S. degree in electrical engineering from the University of Michigan in 1925 and joined Niagara Falls Power Co. He soon became a field representative of the Electrical League of the Niagara Frontier, promoting the "Red Seal" plan for adequate house wiring. Two years later he assumed his present position. He has been a member of the EEI Farm Group since 1943, serving on the Farm Utilization and Rural Youth Committees. He was a member of the Advisory Committee for the *Farm Electrification Manual*. Mr. Lloyd has been an active member of the Industry Committee on Interior Wiring Design and was chairman of a subcommittee that produced the *Handbook on Farmstead Wiring Design* in 1946. The handbook was revised in 1954. He has been a member of the American Society of Agricultural Engineers since 1930 and was elected a fellow in 1954.

Farm Promotion Committee

Basic display kits have been prepared by the Farm Promotion Committee, under the Chairmanship of H. M. GIBBS, Texas Power & Light Co., to support Farm Ventilation, Crop Drying, Farm Lighting, Electric Heat Applications and Electric Brooding promotions. An additional kit featuring electrically operated farm chore equipment will be prepared for use in 1959.

The committees plan, also, to produce three direct mail or handout pieces to support the Farm Ventilation, Lighting and Brooding promotions.

The first sections of the *Farm Sales Engineering Handbook* are being produced and should be available for distribution early in 1959. This is to be a continuing activity with the Committee planning to produce additional new sections in 1959. The material has been field tested by farm sales representatives of electric companies and has been proven to be a valuable reference for answering sales prospects' questions.

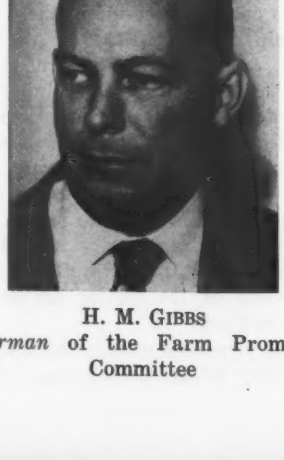
Chairman H. M. GIBBS, Manager of the Farm Service Division, Texas Power & Light Co., received his B.S. degree in social science from North Texas State College in 1945. He received his master's degree in vocational agriculture from Sam Houston State College in 1939, after having served as principal at two junior high schools. He taught vocational agriculture and later was appointed a county agricultural agent. In 1947, after serving in the U. S. Navy during the war, he became rural supervisor of Houston Lighting & Power Co. He assumed his present position early in 1951.

INDUSTRIAL POWER AND HEATING GROUP

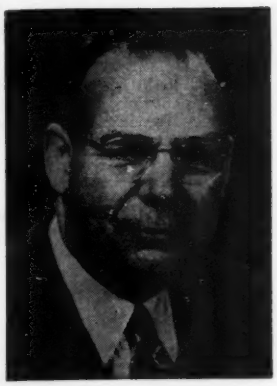
Under the Chairmanship of PAUL W. MCCORMICK, Union Electric Co., the Industrial Power and Heating Group in its 1958-59 activities will emphasize:

1. New load-building opportunities of all types that tend to increase net income and improve system load factor.

2. Specific promotion programs on industrial lighting, industrial



H. M. GIBBS
Chairman of the Farm Promotion Committee



PAUL W. MCCORMICK
Chairman of the Industrial Power and Heating Group

electric process heating and industrial space heating.

3. Study of current economics with respect to competitive power and competitive fuels.

4. A program for training and stimulating power sales engineers in more creative selling.

5. Cooperation with Industrial Electrification Council in the promotion of industrial electric process heating and space heating.

In addition, the various committees and subcommittees will continue work of a recurring nature such as the revision of existing chapters of the Power Sales Manual and the preparation of new ones; and the gathering and dissemination of information on competitive situations (including governmental competition), new power and heating applications, customer information programs, group selling techniques, direct mail advertising and other related subjects.

Chairman PAUL W. MCCORMICK, Industrial Sales Manager, Union Electric Co., holds a degree in electrical engineering from the University of Missouri. After graduation, he joined Union Electric as a student engineer; he was assigned to the sales department, where he served as commercial representative, assistant industrial engineer, industrial engineer and supervising industrial engineer. He was appointed to his present position in 1948. Mr. McCormick is a registered professional engineer in Missouri and is an active member of the Sales Executive Association of St. Louis, the St. Louis Electrical Board of Trade and the Illuminating Engineering Society. He has been active in the EEI Industrial Power and Heating Group since 1948, having served as Chairman of the Competitive Service Committee, the General Power and Heating Committee and the Industrial Sales Methods and Development Committee.

Competitive Service Committee

The Competitive Service Committee, under Chairman R. W. BASCHNAGEL, Rochester Gas and Electric Corp., will study and report on all types of competition for power supply. The Committee will continue its analysis of the installation and the removal of private generating plants and will collect, correlate and disseminate information on operating costs, performance and equipment costs of competitive equipment.

The Steam Competition Subcommittee, under the Chairmanship of Q. Q. QUINN, The Connecticut Light & Power Co., will watch closely all developments in private steam-electric generating plants and the competitive aspects of thermal fluids for space and process heating and for power generation.

The Internal Combustion and Other Competition Subcommittee, under the Chairmanship of W. P. LYMAN, Carolina Power and Light Co., will continue to study the competitive aspects of diesel-electric generation and the developments in the gas turbine and atomic power fields as applied to industrial power generation (and will assemble and disseminate information on governmental competition.)

Chairman R. W. BASCHNAGEL is Supervisor, Power Division Commercial and Industrial Sales Department, Rochester Gas and Electric Corp. He received a degree in electrical engineering from Massachusetts Institute of Technology and joined RG&E in 1935 as industrial and commercial sales engineer. He served as a captain of Anti-Aircraft Artillery during World War II. He returned to RG&E in 1945 and was promoted to his present position in 1950.

R. W. BASCHNAGEL
Chairman of the Competitive Service Committee

J. H. AHRENS
Chairman of the General Power and Heating Committee

He holds a New York State professional engineer's license. He has been active in the Electrical Association of Rochester, the AIEE and in Rochester community affairs. An active member of the New York State Society of Professional Engineers, he has been a member of the EEI Industrial Power and Heating Group since 1952.

General Power and Heating Committee

The General Power and Heating Committee, under the Chairmanship of J. H. AHRENS, The Hartford Electric Light Co., will study and disseminate information on industrial power uses and report on new power-using equipment for industry, report on electrical problems affecting industrial customers, cooperate with and provide information as may be needed by other committees, and study industrial markets for opportunities to increase power sales. The Committee functions through three subcommittees:

The Electric Heating Subcommittee, under its Chairman, F. F. DICKMANN, West Penn Power Co., cooperates with the Industrial Electrification Council on a program for the development of industrial electric process heat and space heat in industry, studies and distributes information on the development and the application of industrial electric heating devices, and initiates new or revised chapters in the *Power Sales Manual* which are devoted to electric heating applications.

The Applications and Equipment Subcommittee, under the Chairmanship of S. L. CHAPIN, Public Service Electric & Gas Co., will continue its study and investigation of new power applications other than those for elec-

tric process and space heating and lighting, will investigate load-building possibilities of comfort and process cooling in industry, will keep abreast of the developments in gas and steam air conditioning, will investigate and report developments in the field of automation and will review chapters in the Power Sales Manual for possible revision and will initiate new supplements as may be required.

The Industrial Lighting Subcommittee, with J. F. MORTON, New Orleans Public Service Inc., as its Chairman, will review various promotional programs in the field of industrial lighting, study and arrange for additional direct mail promotional material, continue participation in industrial lighting conferences with lamp manufacturers for the benefit of industrial power salesmen, and will investigate and report on new lighting methods and equipment.

Chairman J. H. AHRENS is Industrial Sales Manager, The Hartford Electric Light Co. After he was graduated from Yale, he spent 12 years on engineering, estimating and cost analysis of industrial plant distribution systems. He has 27 years experience in the utility field including seven years with United Illuminating Co., New Haven, and 20 years with Hartford Electric. With this utility he has been technical engineer in the distribution department, industrial power consultant in the sales department, and industrial sales manager. Mr. Ahrens is active in professional and community organizations.

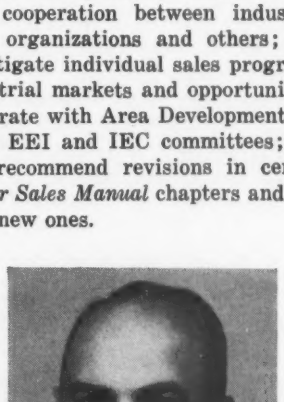
Industrial Sales Methods and Development Committee

The Industrial Sales Methods and Development Committee, under the Chairmanship of A. D. SPILLMAN, Philadelphia Electric Co., is responsible for the accumulation, study and dissemination of information pertaining to industrial sales promotion methods; sales organization, personnel and training; cooperation with sales allies; and the development of sales programs and techniques designed to increase industrial electric power sales.

The Development and Training Subcommittee, under its Chairman, G. R. BLACK, Wisconsin Electric Power Co., will have as its responsibility the study and development of methods used to improve the knowledge, information and sales techniques of the personnel of industrial sales organizations in member companies; it will investigate, study and develop a Seminar for power salesmen; study and disseminate information on industrial sales training programs; collect, study and develop information on specific training programs in cooperation with equipment manufacturers, distributors, dealers, architects, consulting engineers and electrical contractors; and will cooperate with other EEI committees and with the Industrial Electrification Council.

A. D. SPILLMAN
Chairman of the Industrial Sales Method and Development Committee

The Sales Methods and Development Subcommittee, with J. M. TURNBULL, Western Massachusetts Electric Co., as Chairman, will collect, study and disseminate information on sales methods and policies; methods to secure cooperation between industrial sales organizations and others; will investigate individual sales programs, industrial markets and opportunities; cooperate with Area Development and other EEI and IEC committees; and will recommend revisions in certain *Power Sales Manual* chapters and prepare new ones.



R. G. MACDONALD
Chairman of the Residential Group

Chairman A. D. SPILLMAN, Assistant Manager, Sales Applications Department, Philadelphia Electric Co., was graduated from Lehigh University with a degree in metallurgical engineering. Mr. Spillman previously was chairman of the Electric Heating Committee. He has served as program chairman of the IEC Industrial Electric Heating Conference, as chairman of the IEC heating division and last year was made a member of the IEC Planning Committee. Mr. Spillman is a member of many other business, professional and civic groups.

RESIDENTIAL GROUP

The Residential Group, under the Chairmanship of R. G. MACDONALD, West Penn Power Co., is composed of the Residential Appliance Promotion, Residential Wiring Promotion, Residential Lighting Promotion, and Home Service Committees.

The primary responsibility of the Residential Group is the development and administration of the EEI-sponsored, national, Live Better Electrically Program, with the basic objective of selling more electric appliances, more wiring, and more lighting in the homes of America. Included in this objective are:

1. The establishment of close contact and liaison with all interested trade allies, so that all segments of the industry may gain maximum benefit from the Program.

2. The establishment of research to measure and evaluate the Program's effectiveness.

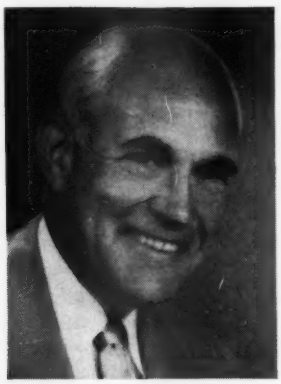
The Live Better Electrically Program is made up of three phases, and each of these phases becomes the responsibility of one of the Residential Committees.

Chairman R. G. MACDONALD, Vice President-Marketing, West Penn Power Co., was graduated from the University of Pittsburgh in 1931 with a B.S. degree in electrical engineering. Upon graduation, he joined West Penn Power and, after some years in lines and construction work, he became successively district manager, division manager, assistant vice president, manager of general services, and in 1955 Vice President-Marketing. He has been active in a number of trade, professional and community groups. He is now a member of the EEI Commercial Division Executive Committee, EEI Awards Committee, Sales Executives' Conference, Pennsylvania Industrial Development Authority Board, Illuminating Engineering Society, a director of the Electric League of Western Pennsylvania and chairman of the United Fund of Central Westmoreland.

Home Service Committee

The Home Service Committee, under the Chairmanship of MISS JUDITH

MISS JUDITH E. O'FLAHERTY
Chairman of the Home Service Committee



EDWARD J. HURLEY
Chairman of the Residential Appliance Promotion Committee

R. J. MILLER
Chairman of the Residential Lighting Promotion Committee

E. O'FLAHERTY, Philadelphia Electric Co., has work interests in all three Residential Committees. It is, therefore, designed to supplement the activities of these committees, and accomplishes this by assigning members to sit with and participate in the activities of the other three committees. In addition, the Committee will continue to conduct the annual Women's National Live Better Electrically Conference and to disseminate information through the Home Service Exchange. On Drexel's 65th anniversary she was one of 65 alumni to receive citations for outstanding professional achievment.

Chairman JUDITH E. O'FLAHERTY is Director of the Home Service Section, Philadelphia Electric Co. A graduate of Drexel Institute of Technology with a major in dietetics, she was a hospital dietition before she entered the utility field. She has been a member of the EEI Home Service Committee for four years. She is a member of the American Dietetics Association, Home Economist in Business, and Electrical Womens Round Table. She was president of the latter group.

Residential Appliance Promotion Committee

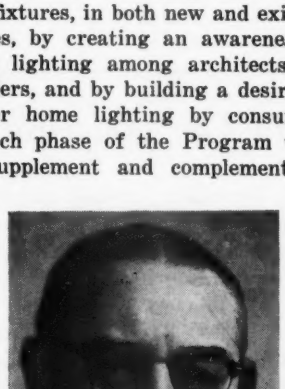
The Residential Appliance Promotion Committee, under the Chairmanship of EDWARD J. HURLEY, The Detroit Edison Co., is responsible for that phase of the Program specifically aimed at increasing the awareness of *electric living* and stepping up the sale of electric appliances, in both the new and existing home markets, through the "Appliance and Medallion Home" Program.

Chairman EDWARD J. HURLEY, Director of Residential and Rural Sales, The Detroit Edison Co., has been with the company since 1926. During the 31 years that he has been with the company, he has held many positions. In 1929 he was appointed a clerk in sales and in 1931 became an office manager. He was appointed supervisor of the company's sales training school in 1945 and later that year became assistant supervisor of the commercial office division. Before he assumed his present position in 1955, Mr. Hurley was supervisor of the special services division and later supervisor of promotion.

Residential Lighting Promotion Committee

The Residential Lighting Promotion Committee, under the Chairmanship of R. J. MILLER, The Cleveland Electric Illuminating Co., is responsible for the third phase of the Program, aimed at selling more lamps and fixtures, in both new and existing homes, by creating an awareness of good lighting among architects and builders, and by building a desire for better home lighting by consumers.

Each phase of the Program tends to supplement and complement the other phases, and all phases are tightly woven together in what becomes one single total Live Better Electrically Program. Thus, very close coordination and liaison are carried on among the Residential Group Committees.



J. R. FURBER
Chairman of the Residential Wiring Promotion Committee

Chairman R. J. MILLER is Manager of the Sales Promotion Department, The Cleveland Electric Illuminating Co. He began his career with the company in 1936, serving as a residential field representative, residential sales supervisor, assistant manager of residential sales, and assistant to the general sales manager, before assuming his present duties. He has served as Chairman of the EEI Sales Personnel and Training Committee, Chairman of the Residential Section, Vice-Chairman of the Commercial Division Executive Committee, and Chairman of the School Service Committee of the Better Light Better Sight Bureau. He is a graduate of John Carroll University.

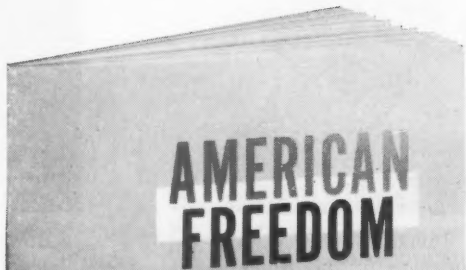
Residential Wiring Promotion Committee

The Residential Wiring Promotion Committee, under the Chairmanship of J. R. FURBER, Northern States Power Co., has the responsibility for the phase of the Program which will continue mass education of home owners on the need for and benefits of more wiring, and to increase the sale of more wiring capacity in homes.

Chairman J. R. FURBER has been General Sales Manager, Northern States Power Co., since 1948. He received a degree in electrical engineering from the University of Minnesota in 1924 and an LL.B. from Minneapolis-Minnesota College of Law in 1948. He was employed by NSP in 1924 as a student trainee and was a sales engineer from 1925 to 1942, when he was named manager, municipal and resale section, general sales office. He has served on these EEI Committees: Street Lighting, Sales Personnel and Training, Area Development, Residential Wiring Promotion, Sales Division Executive, and Residential and Farm Policy.

NOW AVAILABLE...

Second Phase In EEI Employee Information Program



Materials Included In The 'American Freedom' Course

Three Colored 35mm. Slide Films which Describe:

FILM 1—How We Got Freedom. This film covers the settling of America, the causes of the American Revolution, the writing of the Constitution, and the purposes and organization of our form of government as they are described in the Constitution.

FILM 2—How We Can Lose Freedom. This film describes the dangers to freedom from inside our borders and from abroad. It tells of the development of Socialism, its backgrounds, and its growth in Europe and the United States.

FILM 3—How We Can Keep Freedom. This film outlines the things that we Americans can do to stave off creeping socialism, emphasizing the role of the individual and the need for individual responsibility.

The Conference Leader's Manual, which includes:

Details on how to conduct the "before and after" survey. Provides script material for introducing and presenting each film. Gives full documentation of the facts and figures presented. Includes texts of major documents in the development of American Freedom, such as the Declaration of Independence and the Constitution and Bill of Rights, for easy reference. Provides guidance in stimulating and handling discussions.

A Printed 64-Page, Two-Color Booklet for each employee, summarizing the entire course and designed to be as interesting to family, neighbors and friends as to the actual participant in the program.

Prices—Set of three films: $15.00. Leader's Manual: $2.00. Booklet: 35c each.
Edison Electric Institute, 750 Third Ave., New York 17, N. Y.

National Electrical Week Plans Announced

- *Theme of Program Is 'Electricity Builds Jobs'*
- *4,500 Guides and Kits Will Be Distributed*
- *50 National Advertisers Already Lend Support*

"ELECTRICITY Builds Jobs," a program to dramatize the vital importance of the electrical industry to the nation's economy and progress, will be the central theme of the 1959 National Electrical Week, Feb. 8-14, N. J. MacDonald, president of The Thomas & Betts Co., and general chairman of the NEW Committee, has announced.

The Week will still be an "umbrella activity" for all branches of the electrical industry, providing a springboard for the various educational, public relations, and promotion goals of our industry, according to Mr. MacDonald.

At the same time—to focus attention on the contributions of electricity and the electrical industry to our American economy — the theme of "Electricity Builds Jobs" will be a feature of NEW programs throughout the nation in February, 1959, he added. "In this connection, our industry has an impressive story to tell," Mr. MacDonald said. For example, one out of every 20 employed people is in some branch of the electrical industry and related services.

Seven Categories

"It is almost impossible in an industry so vast and so widespread as the electrical industry to make employment and total compensation comparisons on the basis of a few arbitrarily selected categories. However, large segments of the electrical industry's employees do fall into seven such categories—manufacturers, utilities, contractors, wholesalers, retailers, service and repair shops, and communications. In 1939, there were some 1,321,900 people employed in these seven categories. They received compensation of $2,277,800,000. By comparison, in 1957, there were some 3,194,000 people employed in these seven categories, receiving compensation of $13,739,300,000.

"We believe the challenging message of electricity as a job builder can be carried successfully to the industry's employees, its stockholders, customers, and the general public—with increased appreciation of our industry generally," Mr. MacDonald said.

Edison's Birthday Included

Mr. MacDonald pointed out that the annual dates of National Electrical Week are always selected to include the Feb. 11 birthday of Thomas A. Edison. "Not only does this highlight the contributions to mankind of Edison and other electrical pioneers of his era," he said, "but it also means that the timing of the observance stimulates a fast, early start every year for our various industry-wide programs."

He reported that already 50 national advertisers— individual companies, as well as HOUSEPOWER and Live Better Electrically—have indicated their intention of participating in National Electrical Week with special messages on network television and radio, and with national magazine advertising.

The national committee expects more than 250 community NEW committees to be formed during the coming months to carry out locally coordinated programs—in the fields "Electricity Builds Jobs," of improved wiring, increased understanding of the industry's role in the life of the community, greater customer appreciation of living better electrically, and other objectives related to the industry's goals.

Science Youth Day

One of the features of many local committee and company observances will be Science Youth Day programs. This activity, under the auspices of the Thomas Alva Edison Foundation and the International Edison Birthday Celebration Committee, is carried on annually on the birthday of Edison to encourage greater interest on the part of American youth in scientific and technical careers.

Beginning immediately, the NEW Committee's 1959 Planning Guide and Kit of Materials will be distributed throughout the electrical industry. Approximately 4,500 guides and kits will be sent to a selected list of industry leaders representing power suppliers, manufacturers, distributors, contractors, dealers, city inspectors, the electrical industry press, electrical leagues and associations, and electrical union representatives.

In addition, copy and planning material for the Week will be sent to companies in allied industries—chemical, aluminum, copper, steel, and rubber—that have indicated an interest in saluting the electrical industry and their contributions to it during NEW.

Extra copies of the guide and kit may be obtained at $1.00 each on order from the committee's headquarters, 290 Madison Ave., New York 17, N. Y.

Sixth Annual

Public Utility

Electronics Seminar

Sponsored by EEI-AGA Electronics Accounting Machine Development Committees

Dec. 1-3

Hotel Commodore

New York, N. Y.

Sales Promotion Awards Competition

EVERY member company is being urged to submit at least one or more entries in the Institute's Sales Promotion Awards Competition. The rules have been simplified to make it easier for electric utility companies to submit entries in any or all of the four contest categories.

M. C. Albrittain, Vice President and General Manager, Baltimore Gas and Electric Co., and Chairman, EEI Awards Committee, announced that again a total of 12 awards will be given, three each in four categories. The contest divisions are Residential, Commercial, Farm and Industrial.

Entire Market Area Considered

In each of these four categories emphasis will be placed on the successful promotion of electrical programs within the four different and complete market areas rather than on promotion of specific appliances.

A brochure announcing the contest and giving full details is being mailed to member companies.

Classifications in each category are to be based on the number of customers (total or farm) on company lines as of Dec. 31, 1958.

In Residential, Commercial and Industrial Sales Promotion Contests, these are the classifications:

Class A...300,000 or more customers;
Class B...100,000 to 300,000 customers;
Class C...Less than 100,000 total customers.

In the Farm Sales Promotion Contest, these classifications have been established:

Class A...30,000 or more farm customers;
Class B...15,000 to 30,000 farm customers;
Class C...Less than 15,000 farm customers.

Deadlines for mailing entries to Commercial Division, Edison Electric Institute, 750 Third Ave., New York 17, N. Y., are: Feb. 1, 1959, for Farm and Industrial Market; and Feb. 15 for Commercial Market and Residential Market.

Deadlines Listed

Residential Market Awards are offered to encourage and recognize sales programs of the electric utilities directed toward the development of the market for residential electric service.

Commercial Market Awards are intended to recognize, and through such recognition, to encourage electric utility sales programs directed at the development of the commercial market for electric light, heat and power.

Specific Rules in the Second Annual Sales Promotion Awards Contest

1. The maximum cover and page size of entries is to be 10" x 14", including the binding edge.
2. The covers must be either plain pressed board or cardboard with simple typed label giving category, date and the submitting company's name and address.
3. Page 1 must be the General Data Sheet properly filled out.
4. Page 2 must be the appropriate Market Data Sheet properly filled out.
5. Page 3 should be a one-page typewritten synopsis covering the following:
   a. Brief description of area covered
   b. Nature and objective of promotion
   c. Participation—by utility, sales allies, other industries, etc.
   d. Advertising, promotion, publicity, etc.
   e. General results
6. Narrative material must not exceed 15 pages, full or partial, typed double spaced, one side only.
7. The illustrative section must not exceed 15 pages, full or partial, one side only, of which any or all may be pocket pages.
8. Illustrative and narrative material in entries may be intermingled.
9. Hand lettering on cover and throughout entry is prohibited.

Farm Market Awards are designed to provide a medium of recognition for outstanding farm electrification sales and development programs by electric utility companies. The awards will recognize and encourage work in sales promotion, education, youth activities, land development, research and in general development of the companies' agricultural service areas.

Industrial Market Awards are designed to increase the productivity of American industry by encouraging creative, broad-scale industrial electrification promotional activity by electric utility companies and to bring recognition to the companies making the greatest advancement in the field each year.

The awards will be handsome bronze plaques suitably inscribed. A plaque will be awarded to the winning company in each classification of the four general markets. There will be three qualified judges for each of the four market contests. Awards will be presented at the EEI Sales Conference, March 9-12, 1959, in Chicago. The contests are open only to investor-owned, operating electric light and power companies in the United States and its possessions.

In addition to Mr. Albrittain, the Awards Committee has as members E. J. Ingram, New Jersey Power & Light Co.-Jersey Central Power & Light Co.; R. G. MacDonald, West Penn Power Co.; A. M. Wade, The Connecticut Light & Power Co., and W. H. Wagner, Wisconsin Electric Power Co.

The Electric Industry

Past and Future

By Kinsey M. Robinson
President, The Washington Water Power Co.

IT is quite true that if a car rests on dead center, no progress can result. Naturally, we assume that progress depends upon change—some kind of change. My message is an appeal for change—a shift in the direction of our progress.

I am going to ask you to give serious consideration to modifying what seem to be our trends in personnel practices. It is a question of taking a new look at our gains, and what could be possible losses. I say this, because to some of us on this great ship called the electric business, it looks like unsettled weather ahead. Perhaps personnel will be willing to adjust the compass needle to the right or left, so that in these troubled waters we can find easier sailing.

Praise for Personnel Practices

I want to praise you for the many things you have accomplished in personnel practices. But I am not ready to admit that the job is done. Where are we going—that is the question. The direction of our efforts today must lead to some kind of pattern tomorrow, and it is hoped that it will be a pattern we can prosper by.

Having lived on the edge of what some call the "good old days," and having been associated over many years with men and women on a practical and forthright basis, I am somewhat acquainted with the ideals in personnel. In the blue-print for a better world being drawn, the right of man to a decent living and a larger measure of security is recognized. I certainly do not question the fact.

None of us likes to think upon the sordid chapters that have crept into the affairs of the human race. We are not proud of them, though the enemies of capitalism point them up with a good deal of satisfaction. Human slavery is one of those chapters. Religious persecution is another. The atrocities of war, and war itself are others. To the list we must add the dark days of labor—child labor, the salt mines of Africa, conditions in some of our early factories and prisons. Lumber camps, wherein men worked ten hours in icy rivers so cold that their limbs never did thaw out, then walked three miles to unheated tents, with heavier debts at the end of the season than when they started—these are the skeletons in the closet that haunt humanity.

So while there may be a wide gap between what workers today consider a decent living, and what an employer can provide out of shrinking profits, to my way of thinking, unless private industry does continue to improve the worker's situation, government will step in and do it for us.

Fortunately, compared with many other fields of business, the electric industry started in labor relations on a relatively high plane. Further, we have not retrogressed. It is hard for the younger generation to conceive the change that has taken place in the past forty or fifty years. We who remember the past know that employees have benefited beyond all belief.

A week ago I asked a man sympathetic toward personnel gains if he thought the companies had also benefited. I asked him if personnel practices had, in addition to providing employee contentment, honestly saved the utility money. He thought a moment and then replied, "Yes, I think so. Not directly, perhaps, but by reducing labor turnover and by increasing production." I did not pursue the question further, but I wanted to ask, "Exactly what improvement in dollars and cents were you shooting at a dozen years ago? Did you achieve that mark, and how do you know that you did?" Measuring results of our efforts should be a most important part of personnel practice.

From a Quarter Century Ago

Out in Water Power service area, we recently moved the Spokane Division and the general offices to a new service building. The move necessitated the handling of files and records dating back to the turn of the century. For example, I recall that some three or four hundred old books—most of them collectors' items—were turned over to a local university. Among the interesting records that came to light was a series of reports pertaining to the painful birth of our electric association in the Pacific Northwest. These records are

An address before the EEI Industrial Relations Committee Round Table Conference Luncheon, Chicago, Sept. 30, 1958.

so revealing regarding conditions of long ago that I would like to refer to a few statements as we go along.

For example, there was a convention back in 1913. That was 45 years ago. One of the speakers says: "Very few utilities make any attempt to standardize working conditions. Most companies have adopted a frankly opportunistic policy, and any attempt at standardization would doubtlessly result in failure under present conditions."

Here is another comment about wages. This speaker says: "There is an attempt to get away from the hourly scale and to put men on a monthly basis. Labor unions in general are adverse to monthly scales, but they seem to offer certain advantages; and where labor difficulties arise, the possibility of adopting monthly scales should not be overlooked."

A Quote from 1907

And here is an observation about 1907 from a utility employee. I quote from this record for some length, because it offers something by which we can compare our employees—their production, the hours, the work, and so forth. Speaking of these days in 1907, this employee says:

"Electrical workers had to be able to do anything. Most of the power and telephone companies laid off their linemen in the wintertime, except a maintenance crew. Unless there was some inside wiring, you had to find other work. Many times I wondered if I was in a business that would ever amount to anything. It seemed to me it was kind of a luxury business, and I doubted if I had selected the right kind of trade."

He goes on to say: "The power company agreed to give me 40 cents an hour and my house rent, which consisted of two rooms back of the office. No modern conveniences were in the rooms, but water was not too far away. I rustled two five-gallon oil cans, cut the tops out, put a wire handle on, and these cans served as containers for dishwater, water for bathing, water for drinking and other necessities. Electricity was 20 cents per kilowatt-hour, and my wife was expected to wait on the trade when I was not at home. Old lamps were traded straight across for new ones."

"We slept on the floor, then bought an old sanitary couch second-hand. My wife made some curtains out of flour sacks, and decorated the bare walls with calendars and front pages of magazines. I was told that hereafter, as long as the employees' coal bin was right alongside the company's coal bin, the company would furnish me with coal, in order to remove temptation.

"We kept one lineman who was also an inside wireman. He was paid at the rate of $3.50 for eight hours, and straight time for overtime. But getting out of bed at night to repair storm damage or give a customer service was all part of the job, with no overtime. (Overtime consisted of building a new line, or wiring a house.) The chief lineman—also a wireman and pipe-fitter and general utility man—was the only regularly employed workman. He was hired to do what he was told to do. His regular hours were from 8:00 a.m. to 5:00 p.m.

"I got my first bad electric shock testing out an armature with 600 volts d-c. Accidents were frequent. We tried nearly anything to get a job done. But I was so enthused that when I was not busy doing maintenance that had to be done, I was out selling. I sold the first electric washing machine out there, the first electric range, and many other 'firsts.'

"It seems to me that I was working all the time. My job was to read meters, keep the books (a double-entry system), keep a stock ledger, collect the bills, wire a house now and then—because many houses were not wired or using electricity in those days—run a service, hang a transformer, charge the lightning arresters at 7:00 a.m. every morning in the substation, and do anything else that needed to be done. I was busy most every day, and so I had to do the bookkeeping at night. I did not have an adding machine, because Osborn figured they did not buy typewriters and adding machines for railroad agents, so why should the power company furnish them; so I bought a used adding machine for $65—five dollars down and five dollars a month."

This employee goes on to say: "I remember on Sundays I slipped outside to play baseball, and the telephone girl would find me if anything went wrong. She had gone out of her way so often to find me, that when Christmas came, I decided to give her a fountain pen, which she needed badly. So I bought her a pen for three dollars and put it on my expense account. But the general office called me up and told me they were crossing it off. In the first place, I wasn't supposed to have an expense account, and certainly not to buy candy or flowers for telephone girls."

This employee then says a word about supervision:

"There was a superintendent by the name of (I'll skip the name) who was a mean old devil. He had worked for railroad contractors; he was hard-boiled, and he cursed with vehemence. The men hated his very sight, and in fact their hate had been growing so much that several attempts had been made on his life. Heavy objects had been accidentally dropped from some high place if he were underneath. But the power company was cognizant of the situation, and they sent another man to relieve him. He was the exact opposite. He was so kind and considerate that the boys got together before Christmas, and against company rules, took up $150 to buy him a gold watch."

Long but Interesting Hours

This writer makes one more statement—about something which I fear many employees lack today. He speaks of his long hours and adds: "But I was very interested in everything. I had almost a fanatical belief that the man who never did more than what he got paid for, never got paid for anything more than he did."

Well, those were the good old days. From a humble beginning, we have lived to realize carefully planned organizations covering all phases of personnel. The utility gives recognition to safety, education, retirement, health and welfare, recreation, holidays with pay, and many other items which have added richly to the well-being of employees, as well as the company. We have experienced very few strikes, and our employees are well-clothed, well-fed and happy. In fact, I sometimes think a few of them are too happy. They look upon their jobs as what grandfather would call a lead-pipe cinch, and grandmother would describe these employees as "snug as a bug in a rug." Of course we love these com-

fortable employees. We love them all; and at the same time we wonder how they would react to the stern requirements of yesterday.

But where do we go from here—that is the question. What is it you specialists in personnel plan to emphasize in the year ahead? We like your conference theme—cost control through personnel practices; but what do you plan to do about it? Some executives have the idea that unless a supervisor comes to his boss and says, "I have a plan to spend less and do more," he is not planning cost control.

Have your personnel people in this room tried making a list of changes that can and should be made, and have you set down proposed savings in dollars and cents? Will the utility's financial report reflect those savings? What do you mean by cost control, anyway? Does it refer to holding the money we have already earned, or do you propose to find new ways to build revenues?

It seems to me that personnel departments will tend to emphasize one of three things in years ahead—either you will devote continued attention to the employee, making him even more contented and happy; or you may emphasize techniques and organizational patterns which go to perfect the personnel department; or—and I put this next possibility in the form of a question—do you think it possible to direct all employees on the payroll toward solving some of the vital needs of management? And believe me, we do have vital needs.

For the fleet of utility ships can expect unsettled weather ahead. In the year 1957, 13,700 business firms in the United States closed their doors, some never to open again. And while electric companies were not numbered in that list, so far as I know, we do have unending problems which have to do with public opinion, revenues and costs,

And if we start to compare personnel advances since the good old days referred to, we should also take a look at other changes including increased taxes, interest rates, the advances of public power, higher labor costs, the high cost of materials, and other operating items which turn us to the personnel departments for help.

I cannot speak for all of management in the electric industry, but I am quite certain that a few other utility presidents will support me when I say that there are several items which literally beg for attention. We do not ask you to retrogress in practices now in work. Recreation is fine; so is insurance, safety, vacations, grievance solving and health.

Shift in Topsail, Change in Rudder

All we ask is a shift in the topsail and a slight change in the rudder to make employees more valuable and more productive. Time may not permit discussion of these proposals, but at least we can toss them into the open and identify them.

First, it is not enough for personnel to give lip service to the problem of cost control.

We need right today to analyze and recommend a better use of manpower in all departments. When work is not being done in the average company, the first tendency is to hire more people. But all of us should know that we cannot minimize losses by adding to the payroll. What we really need is job evaluation from management's viewpoint. Job evaluation as we commonly know it will not accomplish this. It simply doesn't do the job.

You can contribute far more to the industry if you will give attention at this point to the combination of jobs, balancing out the work load of individuals and eliminating those job titles in which employees are overly comfortable—in short, those employees who do not have enough to do.

Out in the Pacific Northwest we have experienced some disappointment in load growth due to most unusual weather conditions. This experience forced us to take a close look at manpower, and here is what was found. We found that we could operate efficiently with 134 less employees. Consequently, the payroll figure was reduced, at a savings of $788,000. Add to this bare payroll cost the other expenses pertaining to these jobs, such as cars, supplies, etc., and the savings from this one move was some $1,500,000.

Combining, Pooling Eliminates Jobs

I firmly believe that by combining jobs and through pooled labor another 50 jobs can be eliminated. Incidentally, there were no lay-offs. All was done by normal means of not replacing employees who left the company. It must not be forgotten that one partly idle employee receiving pay at the rate of $500 per month is more expensive to the company than an investment of $100,000 in an automatic machine. In 10 years, 10 such employees equal a million dollars in new plant equipment.

Therefore, I ask you specialists in personnel practices if you are willing to examine our payrolls with an eye to more efficiency.

Are you willing to put aside what seems to be an absorbing interest in job specifications to learn which of them actually are not needed? I hope so.

To my mind, the industry has gone slightly overboard on this matter of individual "job specs." There was a time when inequality between work of the same type demanded standardization. It was not right for one stenographer to receive $75 while another doing similar work received $175.

But once this major leveling off was accomplished, I sometimes wish the whole system were placed in the far end of a dark vault and kept there. Many employees should never have seen it. For actually, when we look at it objectively, a job spec is a limiting device at best. We ask the employee to work with prescribed, static duties. It is a most restricted list of duties that discourages change. We pay the employee for the minimum. In scores of instances the employee points to the "job spec" as the reason he should not do more.

Someone remarked that we have unionized our employees, we have regimented them, without admitting the fact. I realize there are ideal objectives as to what "job evaluation" is intended to do. Right now I speak of practical application day by day, as many of us see it. Job evaluation encourages too much attention to the least productive part of employment. It ignores growth and that much-neglected word called "work," and merit rating, in my opinion, does not fill the gap. Consequently, many companies have discarded the system entirely.

Out our way, when job evaluation was instituted, we in management anticipated that once equality and fair-

ness were established, our personnel department would turn its attention to the human element—cooperation, incentives, work habits, and ways to actually measure gains in production. But often, the variables in a job description—all those thousands of odd numbers and points which must be matched against each other—become an obsession, and the potential of our employees is tragically ignored.

This fact was recognized in the so-called "good old days," as the following shows.

Back in 1912, a utility president speaking at one of the association conferences had this to say:

"It is the duty of every manager, the absolute duty of every department head to personally ascertain what the particular ambition of every subordinate is; to determine if he is qualified along that particular branch; and if so, to give him the opportunity of developing himself, even to the extent of allowing him to increase his knowledge. If I could but instill in your breasts the importance of learning the possibilities of your employees, their hopes, their ambitions, their abilities, and giving each man the opportunity to develop, that alone would compensate me for my long hours of work as president of the association."

True Then, True Now

Though expressed 46 years ago, it holds equally true today. It is a challenge to personnel departments to return to the human side of personnel, and for one, I am convinced that we can do a great service, both to the utility and to individuals, if we will devise our job descriptions to encourage the absorption of more work, even if we have to combine jobs to do it. That is the first change I have taken the great liberty to propose.

Secondly, it seems to me there is a definite place for employees in all departments to help build utility revenues. Back in 1912, another utility leader looked at the matter very much as I do. Both of us would be inclined to make all personnel departments responsible for some kind of policy change which will bring much needed results. Here is what he says: "To me,"—and I am quoting him, "To me, it would appear one of the most vital questions to be considered—this problem of merchandise sales by employees other than salesmen. We have clerks in different departments, motormen and conductors, who with proper coaching might be encouraged during their idle moments to sell appliances to friends and neighbors. The fact that employees themselves use such appliances would work wonders toward their use by others."

A little electric heat campaign out in Water Power service area last year resulted in over 4,000 heating prospects turned in by employees. Of this number, over one-third resulted in sales, making a total of 1,500 heating jobs installed during the year.

Every time our employees are given a specific challenge in the line of prospect finding, they do a tremendous job.

I saw one survey—fortunately it did not pertain to a utility—wherein 80 percent of employees thought such extra effort would benefit a few wealthy owners and bring no benefit to the employees.

Someone has failed to tell these employees the facts of life. Most employees are looking for leadership. Whether you give them awards, or bonuses, does not seem to matter. Out West, our employees said definitely they do not want extra compensation, that what we ask of them is little enough to do for their company. Several other utilities have interested their employees in load building, but unfortunately the personnel departments had no hand in it. Now see how easy it becomes. Here an employee with a new dishwasher invites his neighbor to bring in the dinner dishes to be washed. That neighbor buys a dishwasher. This happens next evening to the neighbor living on the other side of the employee's house. Again a sale is made—a tremendous job in the overall.

Yet, never in my life have I seen one job specification, or one merit rating list, for that matter, which gives emphasis to all-employee participation in building revenues. And I wonder why. Of course you are interested in the absolute need of your company to progress. There is no question in my mind, and certainly no law against your finding some way to make load building a part of every job, and the basis of merit rating. I say you can find some way to do it if you want to. This is cost control of practical nature.

Third, every utility president today needs the support and influence of the entire employee organization, in combatting the inroads of public power. Imagine it! Only some five percent of our customers can begin to explain what is meant by the Preference Law, and it is reported that only two utilities in the nation have made serious effort to teach the meaning of Preference. Only a handful have any idea of how tax inequality affects the private utility. Nearly a third of our population can see no relationship between state socialism and public power.

The public is not informed, and certainly our employees are not informed. Yet again, as in sales work, I have never seen one job specification, or one merit rating list which gives proper emphasis to this gigantic problem of informing the public. We are all talking customer understanding, yet how many personnel departments are doing something about it? If personnel practices can give merit points to an employee for appearance, resourcefulness, accuracy, and similar vague matters, surely we can find some way to reward employees for giving talks, booking films about our private enterprise system, and handing out literature.

Participation in Company Affairs

From my own experience, employees—most of them—do not resent such participation in company affairs. It may surprise some of you to know that where only nine percent of utility employees over the nation are known and recognized by their customers, through employee activity, according to our surveys, some 65 percent of Water Power employees are known and recognized.

At present, we have a contest to see if everyone of our 1,208 employees can make 10 new friends. We are working for the high mark of 75 percent acquaintanceship by the end of the year 1958. Again, these programs are seldom or never initiated by the personnel department. Yet, in my opinion, they should be.

And if you want to do a practical service for your

companies, you will first start to inform employees regarding our economic and political situation, and then reach out to our customers. For it is this sort of thing that gives the employee a sense of belonging. It permits the employee to contribute something from the better side of his nature. It is one of the best answers I know to the question of morale and personal progress.

I mention this next need of management, because in the end it has a most pointed and direct bearing upon cost control. I refer to the matter of selection and training of future supervisors and executives of the company. Of course most of us have some system in work at present. We at least go through the motions of selecting employees with potential; we go through the motions of indoctrination and training; and we keep our eyes and ears open to learn where to turn when an administrative job opens up. But I sometimes wonder if any of us ever made a list of our failures over a 10-year period. In how many instances did we select mediocrity? Just how good are we at this job of selecting supervisors for the future?

There will not be so much latitude for mediocre performance in years to come. One company reports that it will need 200 first-line supervisors and executives in the next 10 years.

A recent issue of *Electrical World* predicts that by 1975, these will be the "good old days."

By 1975 we will be spending two and three-quarters times as much money for system expansion. Three and two-thirds as many kilowatt-hours will be generated. Our size will be three times what it is today. And I wonder what you are doing toward making a better selection of manpower. We have to date been very fortunate in the electric industry. We have had very good men.

But now we need more men with qualities of leadership. We need men who, in addition to possessing good health and ability to get along with others, can learn, observe, plan, and who can make decisions. And we must turn to the personnel departments for help. Will you find men and help them? Will you devise some way to help lay out day-to-day programs for our young supervisors, and especially, will you help find accurate ways to measure their accomplishments?

I want you to accept management's gratitude for personnel progress you have made over the years. You have done a good job. But, I repeat, we cannot stand still. If you want management's continued gratitude, hitch your star to the more productive side of personnel for a few years, and to management's needs for a while. All of our employees are not satisfied, even though they are apparently contented. They, too, want to realize their latent abilities. To a majority, personal realization is more important than pay. Employees want to progress. It is largely up to you to help them toward the company's best interest, which, after all, is to their own best interest, too.

'American Freedom' Course Is Available from the Institute

"AMERICAN FREEDOM," an employee information course designed to present in comprehensive, easily understood terms the vital role of freedom in the American way of life, is now being offered to member companies by EEI.

Tried and Proven Program

A tried and proven employee information program, "American Freedom" tells its story in three parts: How We Got Freedom, How We Can Lose Freedom, and How We Can Keep Freedom. Derived from authoritative sources, the program is carefully designed to achieve a high level of employee interest and understanding through the use of an attractively illustrated booklet, a series of colored filmstrips, and a tested method of directing group discussions.

A Conference Leader's Manual, included with the course materials, provides guidance for conducting the sessions.

"American Freedom" is the second phase in a series of employee information courses developed by EEI. The initial phase, "The American Economic System," was offered to member companies last year. The third phase, dealing specifically with the electric power business, is now in preparation. Each of these courses is designed so that it may be presented as a unit, or in the three part program.

Price of Program

The set of three film strips is $15; the Conference Leader's Manual is $2; and the 64-page, illustrated booklets are 35 cents each.

All materials may be ordered from EEI, 750 Third Avenue, New York 17, N. Y.

American Electric Power Exceeds 5 Million Kw

THE American Electric Power Co. is the world's first electric power company to exceed a total generating capacity of 5,000,000 kw, AEP says.

The 225,000-kilowatt Unit 1 at the Clinch River plant, Carbo, Va., is now in operation, raising the AEP System's total power capacity to 5,113,000 kw. In the United States, only 10 states have a total generating capacity that is greater.

Second Unit to Open

A second generating unit of the same capacity is scheduled for completion this month.

Philip Sporn, president of AEP and of Appalachian Power Co., said: "Completion of Unit 1 at the Clinch River Plant is doubly significant: it not only raises our system's power capacity to a new record plateau, it also represents a major contribution to the growth and development of the southwest Virginia area."

Cost Control Through Selection and Training

By DeWitt Pike
Vice President, Rochester Gas and Electric Corp.

A Critical Look at Our Selection Procedures and Training Programs Needed; Four Factors Which Are Important to Successful Employee Training

IN examining employee selection and training procedures to see if they have failed to work for the best economic interests of our companies, it is unlikely that we will discover any acute disorders, for the know-how of selection and training has been the concern of industrial relations men for many years. A re-examination of our know-how may, however, convince us that we are not using it most effectively to achieve cost control or economy in our operations.

Adequate selection and training procedures are in themselves high-priced budget items and in these days of the cost-price squeeze they suggest an approach far less popular or direct than taking a cleaver off the hook and whacking away at anything that costs money, including labor, materials, and services. This common approach with the axe, however, hardly achieves the desired result of the more effective use of men and machines. To justify the expansion of selection and training programs as the logical steps for providing a more effective labor component for our business, we must show that they result in better electric service at a lower cost.

Our greatest roadblock is the lack of an objective method of measuring the increase in productivity that results from more careful selection and better training. Even a slight improvement in the overall effectiveness of the work force offers the potential of substantial economies when we consider that payroll and benefits are the largest item of operating costs. It is somewhat surprising that even in the defense business with its astronomical costs of nuclear weapons, atomic submarines, and aircraft carriers, the top budget item is the cost of manpower, including recruitment and development of the skills necessary to our defense operation. How much can we reduce these costs by improving the knowledge, skills, and attitudes with better selection and more training?

Value of Employee's 'Interest'

John Riegel of the University of Michigan has made an interesting study of eight manufacturing companies and has estimated the economic value of "an employee's *interest* in the success of his company." This interest factor is a human quality that we can conceivably select for, and certainly train to achieve. Mr. Riegel estimates that the total loss to these eight companies as a result of substandard performance due to this one factor is as much as 18 per cent of the total potential. Disagree with John Riegel if you will and pick your own percentage; even a much more conservative figure as a percentage of payroll and benefits should be encouraging evidence that there is justification for better employment practices and better follow-up and development to produce employees of greater economic value to their companies.

The Employee Ledger

In the utility business we are traditionally free from the costs resulting from high labor turnover. But what about the employees we hire whose performance is substandard or who are involved in frequent accidents or have excessive absenteeism and who remain on the payroll? Without a doubt many of these unnecessary costs result from poor selection or improper training or both. How much can we assess the balance sheet with our mistakes in selection and our failures in training?

I would like to suggest that there is no more important personnel function in our companies today, in view of our great concern with the need of "cost reduction," than a critical appraisal of our selection procedures and training programs. We could well ask ourselves these important questions: "Do we have the right people in the right jobs, and if not, what are we doing to remedy the deficiency?" and secondly, "What are we doing to help our people prepare for better jobs? What can we do to make certain we have manpower with potential ability and potential willingness and how can we get this manpower to develop and use this ability?"

The selection process starts with good public relations. It is an obvious truism that the very best screening will produce no better employee than the quality of the applicants that are attracted to our employment offices. This would seem to indicate that the personnel department has an important stake in the company's public relations program and perhaps even means that the personnel department needs to establish its own public relation goals and work to achieve these goals. How can we check to see that the quality of applicants available to us is equal or better than the quality of those attracted to other companies, and what

An address before the 11th Annual Round Table Conference of the EEI Industrial Relations Committee, Chicago, Sept. 29, 1958.

can we do to correct our deficiencies? What more can we do to sell the advantages of the utility business to the "in-school" youngsters who will be looking for tomorrow's jobs?

A critical look may indicate a greater need to take our employment functions into the field, not only for college graduate selection as is now our custom, but perhaps into the high schools and trade schools as well. Many companies report the increasing use of co-op or work-study arrangements with technical and trade schools. In this arrangement the company has a good opportunity to look at the student and the student has an equal opportunity to know the company. This tends to eliminate some of the uncertainty of the selection process and appears to be producing good employees.

A Look to the Future

In reviewing our selection procedures, I wonder how many of us have considered the importance of formalized written personnel policy on selection. At first thought this may seem unnecessary, since, obviously, we are all striving to select the best man available for the job at hand. But is that our real objective or could it be that it is more important to select the candidate who has the ability to obtain the highest job in the promotional pattern he enters? I am not suggesting that we hire only candidates who have the potential of becoming the company president, but I am suggesting that there are well-defined promotional patterns and the new employee should be considered beyond the job he is hired to fill. Perhaps there is a need to define our selection policy so that those doing the selection may have a standard to strive for and evaluate against, and so that all in our organization can better understand our objectives as we send prospective employees to them for interviews.

Selection Procedures Abused

How often are the selection procedures by-passed to satisfy the desires of a foreman, superintendent, or top executive who has pre-selected a candidate from his own sources to fill a job vacancy in his department. A formalized written selection policy may help hold the line against this abuse.

The screening process usually includes three major activities: interviewing, examining, and checking. These may well be expanded into 15 or 20 specific steps. Can we afford to skimp on our selection procedures and thus eliminate the possibility of obtaining information that will permit better judgment of an applicant's potential ability and capability? (A barometer is a fairly good weather predictor, but the weather bureau in my home town uses many other guides and still is frequently incorrect in its forecast.)

The diagram shown in Fig. 1 can well serve as a check-list of the flow procedures many are using in the selection process. I hope you will question the need for all these steps; for example, do you feel that test results are valid? If you have lost faith in testing procedures, is it because you have misused the results? Should we, as some would suggest, eliminate this costly and time-consuming element of our screening process? Unless we have convincingly demonstrated by post-selection analysis that we can eliminate any one of these steps, without impairing the reliability of our screening process, then I think that for most of these steps the cost in time and money can be justified. Before a small roller bearing is accepted as a part of the front wheel assembly of your automobile, it has passed at least this many go and no-go gauges. It has been tested for composition and hardness and scrutinized by not one but many inspectors who perform a function similar to that of interviewers. If this procedure is necessary to produce a smooth-running, efficient machine, is it not important to be equally thorough in assembling the human components into a company organization?

Now let's take a look at follow-up and counseling procedures. Just as the quality of employees can be raised by improving pre-selection, so a good post-selection program of progress rating can check our pre-selection procedures and indicate if judgment was right or wrong. This will not only give a clue to better selection but, equally important, the wrong-choice employee can be eliminated before he becomes a permanent fixture. We should eliminate employees with a record of frequent absenteeism, accident-proneness, or emotional instability during the probationary period, for many believe the pattern established during the first months will continue throughout the employee's entire work years. Let's not fail to remember that we are making a selection that may cost several thousand, yes, several hundred thousands of dollars every time we sign up a new employee.

Even before the selection process has been completed, the training process has begun, for no company has a choice between training and non-training. The choice is between planned or unplanned training and our question is: "Does a well-planned training program pay off?"

'Man, Not a Hand'

We recognize the value and, generally speaking, do a fairly good job of training the employee in the skills and knowledge required for the job for which he was hired. However, as it has been wisely said, "You can't hire a hand, you hire the whole man." And he brings the whole of him to the job—his needs, his aspirations, his intelligence, his judgment, his whole personality. So his training requirements go far beyond the development of skills to satisfy the job for which he was hired, and the recognition and understanding of these needs must become the basis for training. This would seem to suggest that our training program must also be concerned with attitudes as they influence motivation and thus improve the overall effectiveness of the man; also, that we must train him for potential promotability to satisfy his urge for making personal progress.

There is a generally accepted philosophy that all true development is self development. Does this in itself relieve us of the moral responsibility to train employees or, having selected a candidate with promotable potential, do we, nevertheless, have a moral responsibility to help him reach his fullest capability.

Training Responsibility

We must ask ourselves the questions, "Where does the responsibility for training begin?" and "How far should a company go? Should training be for the rank and file or just for the potential leaders?"

There is a growing interest in the

so-called executive development programs. I hope you will question this as the primary target for training.

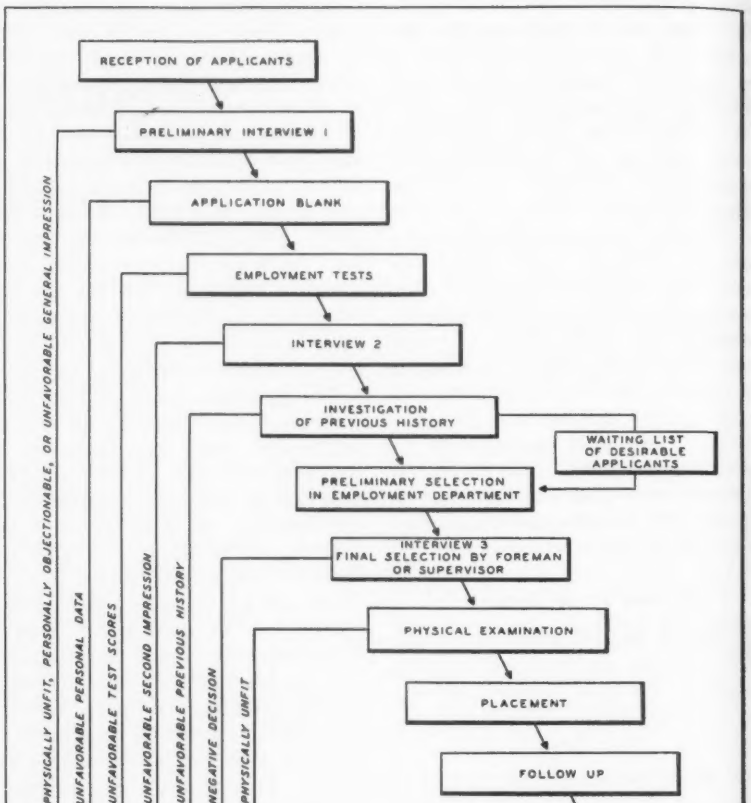
It is possible that all-level training, coupled with a consistent merit rating program and a firmly established promotion policy, is the surest way to channel the really qualified executives to the top.

These are basic questions that must be answered for each company before a *planned* training program can be established, for the first step is a concise policy statement of the objectives to be achieved. For example, is the principal object to assist each employee to develop to his greatest potential? Or are we more concerned with the development of a reserve of supervisors and managers to serve the company's future needs?

Employees may be classified at levels ranging from unskilled to executive. Training needs and training methods will vary over the range. The method of training will vary from the "on the job" approach, with the supervisor as the key man, to "vestibule" training under qualified instructors, and to "off the job" training that includes special courses offered by schools and universities. There is a wide variety of outside professional help but the responsibility for training cannot be divorced from the line organization. It is a time-consuming responsibility for the foreman and supervisor and that is the chief reason that so little progress has been made.

It is my personal belief that the crux of any training program is the phase that builds better human relations, for if our objective is cost reduction, we must try to influence attitudes and other factors that motivate employees. A training in "concepts" as well as "skills" is essential if we are to build a work force in which each individual will *willingly* do his best to help his company succeed. If this objective can be achieved, then we should be able to measure results in terms of productivity.

Systematic appraisal of employee performance by means of a consistent merit rating program seems to offer one additional possibility for measuring the results of a training program, but there seems to be an urgent need for more basic research so that we can be more objective in evaluating those characteristics of



National Industrial Conference Board, Studies in Personnel Policy, No. 144.

Fig. 1—Flow Chart of Selection Procedure (after Uhrbrock)

an individual that affect his job performance. We each have our ideas and opinions, and in selecting new employees or new supervisors we act on our best judgment, but there is too little basic research using controlled groups to show the actual importance of the many variables. Similarly, when social science research provides us with better motivation dimensions, we can aim our training programs more directly on the target. Even lacking this research, there are some factors that I think we will all agree are axiomatic to the success of any training program:

1. Training must be continuous.
2. A training program needs management support and even executive participation.
3. Success will be proportionate to the needs it meets.
4. Training is more readily received in a climate that gives evidence of good communications.

If a successful training program is achieved, the results should not be separate from but a part of productivity and a measurable factor of cost control.

And finally, if the pressure of the cost-price squeeze is not enough to prod us into improving our employment and training practices, let's remember that we as a nation may be fighting for our very survival. Citizens of the free world are greatly outnumbered by those who would oppose our way of life and our survival may depend upon our ability to out-produce the Russian-dominated nations. To do this, we need every man in that place where he can make his greatest personal contribution to the success of our operations and instilled with a willingness to do his best.

Research by Electric Utilities—II

System Planning and Operation, and Power Plants

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(This is the second of a series of three articles on what the electric power companies are doing in research, based on a survey of research among EEI member companies.)

System Planning and Operation

ELECTRICAL systems must be planned well in advance of their construction. Loads are growing continually but not uniformly. Good planning includes making provisions both for the immediate local load conditions and for the long-range changes in system characteristics and arrangement to accommodate future enlarged load requirements. The thorough understanding of technical and economical relationships necessary for intelligent planning can come through studies and research. The quality of service rendered to customers and the cost of that service will depend on the care and skill with which the system is planned and with which it is operated. A resume of the research which the electric power utilities are carrying on in this field will be given in this article.

Load Forecasting: The basis of all planning is the forecasting of what the load is likely to be tomorrow, or next year, or five or ten years hence. Forcasting is, of necessity, somewhat of an art rather than a science, but there are aids which can be obtained from research. The following specific research projects of this nature are reported:

Use of aerial photographs for predicting load growth in specific areas.

Use of radar to give warning of approaching ice storms and thunder storms.

Effects of temperature and sunlight on system load.

Generating Capability: System economy requires that the amount of available generating capability be the least practicable which is adequate to carry the load with the proper degree of reliability, taking account of equipment outages due to failures and for maintenance. Several studies of generating reliability by statistical and probability methods are being made to produce useful guides to good judgment in this problem.

The unit cost of generator capability becomes, in general, less as the size of generating units increases, but for each particular system there are limiting conditions to be observed which restrict the size that is feasible and economical. A research study is devoted to determining simplified methods for making economic comparisons and for arriving at the optimum size for any system.

What Is Good Service?

Service Criteria: What is good service to customers? This depends, of course, on the type of customer, on local conditions, and on good judgment. Two companies report carrying on studies of certain basic criteria for service continuity and voltage variations which will be useful for comparison and guidance toward the best practical answers.

System Voltages: With increasing loads on power systems there has been a trend toward higher and higher distribution voltages to enable these loads to be carried efficiently and economically. To justify such higher voltage, the greater cost for equipment must be overbalanced by the increased load-carrying ability and decreased line losses. Also, on any particular system, there are considerations of the displacement of existing voltage, reliability, maintenance problems, etc. A general study to develop methods of determining optimum distribution voltage is listed, and one dealing with the application of 12/20.8 kv for distribution.

Engineering Economics: Economic comparisons between two or more alternative plans or designs are an everyday matter in engineering planning. Typical examples from our list of research projects are:

Economics of aerial cable as compared with open wire distribution.

Economic conductor sizes for transmission (new method).

The simple basic principles applying to such studies are quite generally known. Uniform specific methods for attacking these problems have not, however, been well formulated. Also, there has not been common agreement on the means for determining the actual rates for annual charges to be used, interest, depreciation and taxes, particularly for the inclusion of income tax. Several companies report research studies on this general problem or on certain parts of it.

System Operation: As systems have grown and generating sources have become more numerous and diverse as to size and economy, more and more attention has been given to maintaining at all times the best possible combination of units in operation and the most favorable distribution of the system load among those units. This requires taking into account the unit generating costs and increment generating costs of the machines themselves, and also the associated transmission losses on the lines. There have been a number of recent developments in methods for reaching this objective, ranging from simplified formulas or diagrams to automatic computers and even automatic control of the load allocation.

11 Companies' Research

Eleven different power companies have reported research on some phases of this subject.

In the class of emergency operation as distinct from usual day-to-day operation two interesting problems have been given research attention:

The possibilities of automatically shedding system load when the emergency becomes such as to make this extreme action necessary. The high inrush of current encountered when picking up a dead distribution area load, due to equipment remaining connected after a service failure; development of methods for successfully accomplishing such pick-up.

Studies of General Nature

Electrical and Physical Phenomena and Characteristics: Under this heading there are various research studies of a somewhat general nature, not subject to more specific classification. The following are of particular interest:

High Voltage Transmission—Transmission at 345 kv is already in operation in this country and still higher voltages are being considered. Two projects dealing with the characteristics of 345-kv lines, including radio interference, are reported. Another project investigates characteristics of lines up to 500 kv at high altitudes. Another project to study corona and radio interference of 115-kv lines at high altitudes is also included.

Lightning—Since lightning is one of the chief sources of service outage it is natural that it is subject to continual study. There are 10 companies which report that they are working on various aspects of the lightning problem, including frequency of lightning, mechanism of lightning flashovers, lightning strokes to tall towers, use of shielding on distribution lines, impulse characteristics of wood, and impulse characteristics of aerial cables. Four other projects deal with the application of lightning protective equipment.

Voltage—Simplification of voltage drop calculations is being sought by two companies. Flicker voltage due to arc furnace loads has become a serious problem on some systems where very large furnace units have been installed. Several studies on this phenomenon, particularly on methods of measuring it, are in progress.

Conductors—A number of projects dealing with various characteristics of conductors were reported. These include studies of AC resistance and impedance of cables, of temperature rise and thermal rating of overhead lines, of conductor vibration and galloping, of conductor burn-down characteristics. There are two projects concerned with the performance of structural steel and of reinforcing steel in structures, acting as electrical conductors.

Thermal Characteristics of Soil—Heat dissipation through the soil from cables and transformer vaults is an important element in their load-carrying ability. The thermal characteristics of various types of soils is not fully known. There are 10 research projects investigating various phases of this subject.

Miscellaneous—Some other interesting projects reported are studies of the soil-bearing characteristics under coal-handling equipment; of vibration in turbine-generator foundations; of noise in power plants and in transformer stations; of the hydraulic characteristics of oil-filled, pipe-type cable systems.

Research in Power Plants

Remarkable progress has been made in the techniques of power generation during recent years and still more advances are undoubtedly in prospect for the future. As might be expected these developments have been accompanied by much research activity on the part of the utilities applied to the many component parts of power plants and their functions. The survey disclosed a great variety of research projects in this field. The scope and nature of the work will be indicated in the following summarized description:

Hydro Plants: The water supply is, of course, an essential factor in hydro generation. Three projects are reported as dealing with the possibilities of "cloud seeding" to increase and stabilize the water obtainable from the water shed. Aerial photography in snow surveys, as an aid in the prediction of water supply, is also being studied. The pump-back method of increasing water utilization is the subject of another study.

Forecasting of river flow and automatic reporting of river flow are the objects of two projects.

Evaporation from reservoirs and means for controlling it have the attention of three research projects.

Two projects deal with improvements in the construction of dams; three others with flumes and canals.

There are four projects covering certain details of hydraulic turbine-generators.

An investigation of the correlation of annual tree growth with precipitation and river flow cycles was reported.

Research with Gas Turbines

Internal Combustion Plants: Although not yet a serious competitor to large steam units, the gas turbine offers interesting possibilities for economy under certain conditions. Three companies report research studies dealing with the possible use of gas turbines in conjunction with steam plants. Participation in the development of a coal-burning gas turbine and of a gasifyer to use in connection with a gas turbine is also reported.

Atomic Power Plants: A very large amount of research and development work is being done by the power companies on atomic power. This has had a considerable amount of publicity and is under a special committee of EEI. For that reason, no detailed listing of projects in this class was made in the research survey, and no further discussion will be given here. It may be noted, however, that about 90 of the country's utilities are participating in this work. Three nuclear power plants in which utility companies have had a part have been completed and put into operation in 1957. Four more important projects are under construction and there are two others on which definite commitments have been made. A number of groups are actively engaged in atomic research which will undoubtedly lead to additional construction projects. (See address by J. W. McAfee before the American Power Conference, March 27, 1958; EEI BULLETIN, May 1958.)

Steam Plants: The very considerable amount of research attention being given by the utilities to their coal-fired and oil-fired steam power plants is evidenced by the fact that

265 projects were reported under this heading. They deal, of course, with a great variety of subjects pertaining to various parts of the plant—the fuel system, the steam system, the condensing system and the electrical system.

Fuels: A number of projects are devoted to the possible use of out-of-the-ordinary fuels by which economy might be realized. These include lower grades of coal, low-volatile fuels, sub-bituminous coal, underground gasification of coal, oil coke, and wood wastes.

Three users of oil as fuel are studying the possibilities of reducing the corrosion of boiler tubes and superheater tubes, and the formation of soot and slag on the tubes, by means of additivies in the oil.

The transportation of coal by pipe line is the subject of two projects (one such line being now in operation.) Improvements in truck transportation of coal has also had attention in another project.

Methods of thawing coal frozen in railroad cars are being developed in three cases.

Improvement in coal sampling is the objective of four research projects. Several others deal with possible improvements in coal bunkers, feeders, and pulverizers.

Economies Affected

Combustion Air and Combustion Products: A better understanding of the characteristics of air flow through ducts and its measurement is sought in three projects reported.

An appreciable part of the heat released from burning fuel is, of necessity, lost up the stack in the combustion gases, but appreciable economies have been effected in two companies by increasing the amount of heat extracted from these gases in the air pre-heaters. Improvements in the operation of air pre-heaters, their cleaning, and their protection from corrosion have also had the research attention of four utilities.

As boiler units have become larger and larger, continuing attention has been directed toward the design of taller stacks and the flow of gases from the station. The increased heights of stacks required by larger units introduces special problems in providing adequate strength to meet wind stresses, particularly those of a vibrational nature. A number of research projects on stack design and combustion gas flow are listed.

In three cases studies have been directed toward the increasingly important possibility of reducing the amount of sulphur components in stack gases. Another project seeks to determine if germanium can be extracted from stack gas in economic quantities.

Ash Removal Studied

Improvement in the removal of ash from combustion gases has the attention of seven companies, taking into consideration the more effective operation of precipitators and dust collectors, fly ash recirculation, etc.

The disposal of the fly ash produced has become a serious problem to many utilities which are using powdered coal as fuel. This ash has several possible economic uses, particularly as an admixture in concrete, as a component material for soil stabilization in road building, as a filler in bituminous paving materials, and some other lesser ones. The market for these uses has not yet been fully developed, however, and the usefulness of the fly ash as full material is limited and has been exhausted in many places. Twenty companies have been applying research to various phases of this problem.

The prevention of deposits on boiler tubes and walls, and improved methods for their removal is the subject of six studies. Possibilities of better furnace operation and control are investigated in three others. Two projects deal with improvements in the construction of furnace walls.

The Steam System: One of the serious problems in steam plant operation is the effect of contaminants in the feed water on corrosion and deposits in the steam and water piping and in turbine passages. Such contaminants are silica, chlorides, iron and copper, dissolved oxygen. The acidity and alkalinity are also important. Among the utility research projects reported there are nine dealing with corrosion or deposits and their causes, seven others on methods of measurement of these water constituents, and 21 directed at the treatment of feed water, chemically or by demineralization.

A basic investigation of the phenomena of boiling has been undertaken by one company.

The EEI is participating in a project headed by ASME for the extension of the steam tables to cover higher temperatures and pressures than have heretofore been included. Steam characteristics at these higher values are now needed for the design and operation of some of the new high-pressure plants, and extrapolation from the old table is not satisfactory. This work involves a considerable amount of basic research.

There is a project which seeks to reduce the length of time for cooling off and for restarting of a boiler by pump circulation of water in the boiler during those periods.

Location of leaks in the steam system has the attention of three projects. Several others deal with chemical cleaning of tubes, purging of residue and scale after construction, improved steam pressure measurement, and steam sampling.

There are eight research projects on steam power piping—one of them on testing new designs by means of models; two on welding of the special alloy materials used; one on testing for flaws; one on the effects of cyclic heating; two on graphitization; one on flow friction factors of forged and bored pipe.

The introduction of the use of "super-critical steam conditions" (pressures at which steam is no longer gaseous) has created special problems in materials and feed water purification beyond those encountered at the lower pressures and temperatures heretofore prevalent. There are six projects listed dealing specifically with this area of research.

Lakes as Cooling Ponds

The Condensing System: A study to develop methods for predicting the cooling performance of lakes acting as cooling ponds for condenser discharge is of interest.

Two projects deal with cooling towers. One of these is a study of the deterioration of wood towers due to fungus attack. The other is on the automatic operation of cooling towers as a function of total heat load.

Three investigations are concerned with interference to plant operation by fish, debris, or algae in the cooling water intake. Another looks to a

means for predicting frazil ice formation.

Measurement of large volume water flow by ultrasonic methods is being developed in one case.

The use of sewage effluent as cooling water is under investigation by two utilities.

One company is experimenting with chlorination of circulating water. Another is working on the aeration of cooling water with flue gas to prevent carbonate scale in the condenser.

The life of condenser tubes and sheets, their corrosion, and means for protection against corrosion occupies the attention of seven research projects.

The practicability and possible advantages of using aluminum condenser tubes is being investigated in four studies reported.

Turbine-Generators: Although research work and development on turbines and generators themselves is mostly the province of the manufacturers, there are numerous opportunities for study by the utilities on matters of effective and economical operation and maintenance.

In order to keep to a practical minimum the amount of reserve generating capability in operation or ready to operate at all times, it is desirable to be able to start up the units—boilers and turbine-generators—in as short a time as feasible. Six research projects are directed at the development of quick starting, taking into consideration the minimizing of thermal stresses, instrumentation, and operating procedures. Two projects related to these are looking into the advantages and methods of prewarming generators to minimize starting stresses.

There is a study under way of the effect of load changes on large generating units and the development of the most suitable rate for such change. The heating of bolts and flanges to permit accelerated loading of turbines was one subject reported.

The occurrence of excessive vibration or of excessive temperatures in thrust bearings makes a fast shutdown of the unit imperative. There are two projects concerned with the development of methods and equipment for automatically tripping the machine under these conditions.

The operation of steam condensing turbine-generators as motors (to supply system reactive) at full vacuum and zero steam flow is under development in one project.

Turbine-generator performance—heat rate and thermal efficiency—is the subject of six research studies. One of these is investigating performance deterioration with age and seeking means of arresting such deterioration. The others deal with means for indicating, calculating, and recording performance, three of them involving special machine computers for the purpose.

Turbine repair and maintenance is the subject of six of the projects, two dealing with turbine blade repair, two with cleaning turbine blades, one with welding a stub shaft, and one with machine alignment.

There are five studies relating to turbine-generator lubricants and their improvement.

Study of turbine governor characteristics with a view toward their improvement occupies the attention of one project.

Matters of instrumentation in steam plants are involved in three projects.

Reducing harmonics in the electrical output of the generators is the objective of two studies. Improvement of transient stability by excitation control is dealt with by another.

In one project, an improved means for detecting failure of a main exciter and automatically transferring to other excitation source to avoid shut-down is being developed. A method of fast transfer of station auxiliaries in case of the failure of their power supply is under development in another project.

Two projects deal with cooling water for bearings, one of them on the use of a closed system for this water, one on methods of conditioning service water to be suitable for this use.

Miscellaneous: There is a study having to do with the application of flame photometry to power plant chemistry problems.

Various phases of fire protection in power plants have the attention of four research projects.

Resolutions Honor Skinner, Hartman For NEW, Electrification Council

RESOLUTIONS recognizing the role of Merrill E. Skinner in organizing and guiding National Electrical Week and the role of J. Reed Hartman in the formation of the Industrial Electrification Council recently were passed by the EEI Commercial Division Executive Committee.

The resolution concerning Mr. Skinner said, in part:

"To give grateful recognition for his generous contribution of devoted effort in organizing and guiding National Electrical Week in its formative stages; and

"To acclaim his role in establishing National Electrical Week as an effective rallying point for the entire electrical industry to focus the attention of the nation on the advantages and benefits of Electrical Living;

"We hereby adopt this resolution expressing our sincere gratitude and appreciation to Merrill E. Skinner, Vice President of Union Electric Co. and retiring Chairman of National Electrical Week."

The resolution concerning Mr. Hartman said in part:

"Realizing the full extent of his tireless efforts in bringing about the successful formation of the Industrial Electrification Council and the initiation of its activities; and

"Recognizing the vital part he has played in the achievement of this joint effort of electric light and power companies and electrical equipment manufacturers for the promotion of greater electricity use in the industrial market;

"We hereby resolve that our sincere gratitude and deep appreciation be accorded to J. Reed Hartman, Vice President of The Cincinnati Gas & Electric Co., and Chairman of the Executive Committee of the Industrial Electrification Council."

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